

TRADING FACES

A Rapid Assessment on the use of Facebook to Trade Wildlife in Peninsular Malaysia

Kanitha Krishnasamy and Sarah Stoner





TRAFFIC REPORT

TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development. TRAFFIC is a strategic alliance of WWF and IUCN.

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Southeast Asia Regional Office
Unit 3-2, 1st Floor, Jalan SS23/11
Taman SEA, 47400 Petaling Jaya
Selangor, Malaysia
Telephone : (603) 7880 3940
Fax : (603) 7882 0171

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Front cover photograph: Wildlife in trade on Facebook in Peninsular Malaysia
Credit: Carlo Convertini

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Wildlife in trade on Facebook in Peninsular Malaysia



KEY FINDINGS

106
sellers

80
species

46
average
number of
posts/month

86%
of the posts were
species that are
internationally
regulated by
CITES

44%
of animals in
trade were birds

380
Maximum
number of
animals

236
posts

49%
of all species in
trade involved
those where trade
is prohibited



METHOD



14

Facebook groups
monitored in
Peninsular Malaysia

Approximately

30

mins/day over a
five month period

67532
members

ENFORCEMENT ACTION SUMMARY



people arrested

animals seized,
including Sun Bears
and Orangutans

All animals offered for sale were live



Banded Linsang



Brown Wood-owl



Buffy Fish-owl



Crested Serpent-eagle



Flat-headed Cat



Pig-tailed Macaque

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ABBREVIATIONS AND ACRONYMS

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
INTESA	International Trade in Endangered Species Act, 2008 Malaysia
IUCN	International Union for Conservation of Nature
MCMC	Malaysian Communications and Multimedia Commission
MYR	Malaysian Ringgit
PERHILITAN	Department of Wildlife and National Parks Peninsular Malaysia
USD	United States Dollar
WCA	Wildlife Conservation Act 2010

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EXECUTIVE SUMMARY

The rapid growth and widespread use of social media has allowed these new platforms to facilitate wildlife trade, both legal and illegal. Market leader Facebook was the first social network site to exceed the one billion marker of user accounts just eight years into its existence. In Malaysia, over 80% of the internet users are reportedly active on Facebook. Given its popularity and scope, it is not surprising that this site is being used to conduct illicit wildlife trade.

The threat of undetected illegal online wildlife trade is real and very relevant and is further compounded by the internet's ability to reach a wide audience within a short time frame. It is suspected that the use of online social networks to conduct wildlife trade is increasingly common. Although reports on the misuse of the internet for the trade in illegal wildlife exist, there has been a distinct paucity of research that examines the prevalence of such trade on access-limited social media sites. Where research does exist, it is often unable to quantify the scale of this trade comprehensively.

With this in mind, TRAFFIC undertook a rapid assessment to monitor wildlife trade occurring on 14 Facebook groups in Peninsular Malaysia, conducted over approximately 50 hours during a five month period (November 2014 – March 2015). The majority of the groups investigated were “Closed”, meaning only members of that group can view activity on its page. At the time of monitoring, there were 67 532 active members in these 14 groups, one of which was particularly substantial, with over 21 000 members.

In total, 236 individual posts of live wild animals being offered for sale were captured and documented from the 14 Facebook groups during the assessment period (an average of 30 minutes a day), with an average of 47 posts per month. A minimum of 311 and a maximum of 380 individual animals from 80 different species were observed for sale. The highest proportions of wildlife recorded were birds (44%), followed by reptiles (34%) and mammals (22%). Close to half of the trade recorded is deemed to be illegal, involving 39 species for which trade is prohibited in Peninsular Malaysia. All animals offered were live, with posts sometimes referring to them as “tame”, indicating a proclivity for the pet trade.

International Protection

Eighty six percent (n=69) of all traded species found during this assessment are governed by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which means international trade in these species is either regulated or prohibited. Ten of the CITES-listed species, with a minimum of 24 individual animals, are listed in CITES Appendix I where international commercial sale in wild-caught specimens is prohibited. Notably, 80% of the non-native species recorded in trade (25 of the 69) are listed on CITES, involving a minimum of 50 animals, meaning any trade in these animals requires a CITES permit. Six of these are listed on CITES Appendix I including four Critically Endangered species such as the Ploughshare Tortoise *Astrochelys yniphora*; it is considered to be the rarest tortoise in the world with only a few hundred adult individuals left in the wild in its native Madagascar.

National Protection

Ninety three percent (n=74) of all traded species found during this assessment have legal protection in Peninsular Malaysia. Almost half (49%) of all species observed in trade are considered “Totally Protected” by the Wildlife Conservation Act 2010 in Peninsular Malaysia, meaning domestic trade is prohibited. Over 60% (n= 49) of all species recorded in trade are native to Malaysia. Significantly, this assessment reveals an unprecedented level of trade in 18 native mammal species, driven primarily by the demand for pets, collector's items and breeding stock. This includes the Sun Bear *Helarctos malayanus*, Sunda Slow Loris *Nycticebus coucang*, White-handed Gibbon *Hylobates lar* and Smooth Otter *Lutrogale perspicillata* and involved a minimum of 83 and a maximum of 101 animals. Trade in these animals is strictly prohibited in Peninsular Malaysia.

Previously not documented at such a scale, this demand for native wild animals as pets is perhaps the most worrying finding of this assessment. Historically, opportunistic illegal wildlife trade posed less of a threat in Peninsular Malaysia due to the absence of physical markets. These virtual markets on social media now appear to facilitate the live animal trade in similar ways as open physical markets do, and are likely to offer a greater variety of species than their traditional counterparts. There was only one documented instance of a trader offering to ship the animals overseas, indicating that the majority of the trade was to meet Malaysian demand.

Traders

A total of 106 unique sellers were identified as those posting the 236 advertisements documented during this assessment. As the majority of the species for sale are Totally Protected from trade by Malaysian law, most sellers were therefore operating illegally. Additionally, only three posts referred to animals being accompanied by trade licences. Of the 14 Facebook groups monitored, one key group disproportionately accounted for 115 advertisements (close to 50% of the total) with at least 60 unique sellers posting on this page, accounting for a maximum of 88 animals being offered for sale. Sellers appear to operate with impunity, and any reference to legislation, legality or permits is rare. Very little effort is made to conceal the illegal nature of some of the trade, and the use of code words or any forms of text deception to describe the species is non-existent.

Enforcement

Time-critical intelligence reports were provided to enforcement agencies when suspected illegal trade was detected throughout the course of the assessment. These reports concerned six advertisements of Totally Protected and CITES Appendix I listed species and were provided with dossiers on traders and their trading activities on other social networking sites (such as Instagram). In addition, all results described here have been compiled and shared with Peninsular Malaysia's Department of Wildlife and National Parks (hereafter known as PERHILITAN) for ongoing investigations, and collaboration with TRAFFIC continues.

While the sheer volume of trade on social media is extremely challenging to regulate, the Malaysian Government has recognised this growing threat and has duly dedicated resources to fight it, led by the Cybercrime Unit of PERHILITAN. PERHILITAN has joined forces with the Malaysian Communications and Multimedia Commission (MCMC), a regulatory body to track illegal online trade, including that occurring on social media. In March 2015, PERHILITAN initiated "Operation Taring" which resulted in the arrest of seven suspects and the confiscation of 64 Totally Protected animals, including juvenile Sun Bears and Leopard Cats *Prionailurus bengalensis*. The Facebook groups targeted in that operation were amongst those surveyed in this assessment. More recently, in July 2015, PERHILITAN arrested four individuals for attempting to sell Sumatran Orangutans *Pongo abelii* after their advertisements were detected on Facebook.

The potential audience of 70 000 members affiliated to just 14 groups on Facebook illustrates that trade on social media is capable of reaching a large client base. Equally, it has the capacity to expand rapidly through its viral nature. Traders are clearly moving to non-conventional methods of sale such as utilising online portals and social media in order to evade detection, reach a broader audience, and increase transaction efficiency and convenience. The scale and nature of this trade undermines governance structures designed to curb illicit activities. This is especially true where a vast majority occurs in Closed, protected areas that limit public viewing. With such high numbers of protected native species targeted by collectors for the pet trade, a more co-ordinated approach to tackle this problem is needed. Although the findings in this assessment point to trade within a specific geographic area, they are reflective of practices that occur on an international platform, and therefore requires a globally-oriented solution.

In line with this, TRAFFIC has initiated discussions with Facebook Asia-Pacific, which has expressed a commitment to working with TRAFFIC to help tackle the illegal online trade of wildlife stemming from findings of this assessment. Facebook reiterates that its Terms of Service do not permit the sale and trade of endangered animals, and that it would not hesitate to remove any reported and verified content that violates these terms. Other collaborative opportunities for addressing these issues are contained within the following recommendations.

RECOMMENDATIONS

Short Term: Improving Detection and Law Enforcement

Consideration should be given to closer collaboration between law enforcement agencies and Facebook to ensure that prolific and repeat offenders are targeted in a co-ordinated and effective manner. Under their Law Enforcement Guidelines, Facebook's current practice is to liaise with — and respond to — law enforcement requests concerning illegal activity. To complement this, TRAFFIC will seek to facilitate collaboration between Facebook and the relevant law enforcement agencies and regulatory bodies in Malaysia, including wildlife departments, multimedia agencies, and the police. This is needed to meaningfully tackle this crime type through a more formal engagement to fully utilise the current procedures outlined by Facebook's Law Enforcement Guidelines. Moving forward, TRAFFIC will also endeavour to work closely with Facebook and relevant agencies in other countries facing similar issues regarding the illegal online trade in wildlife.

Medium Term: Civil Society Engagement

Private sector companies that operate social media sites play a pivotal role in raising awareness regarding this issue. Equally, members of the public accessing these sites are encouraged to report illegal activity to the authorities, or other platforms available for such purposes. The current situation means consistent and wide-scale monitoring of illegal activity on social media sites is largely absent and remains a challenge for law enforcement. However, the public denouncement of illegal wildlife trade on social media sites could serve to deter potential sellers. Various options to report violations involving wildlife crime exist, which include:

1. A direct report to law enforcement agencies at a national level;
2. A direct report to Facebook itself: Facebook's Community Standards is a strong affirmation of its policy against any illegal activity, including wildlife crime, and provides a procedure for any direct reports to Facebook (https://www.facebook.com/help/181495968648557?ref=community_standards);
3. A report through TRAFFIC, including via the Wildlife Witness App that can be downloaded for iPhone (<https://itunes.apple.com/us/app/wildlife-witness/id738897823?mt=8>) or Android (<https://play.google.com/store/apps/details?id=com.taronga.wildwitness>) Reports can involve posts, messages, groups and other elements that can be considered a violation of legislation.

Long Term: Co-ordinated Dedicated Forum

While in many cases authorities are able to take action against illegal wildlife activity within their jurisdiction, more can still be done to effectively and efficiently address this identified problem. Given the scale of this problem at an international level, TRAFFIC encourages a dedicated forum at a global and regional level with social networking bodies, governments, intergovernmental bodies and NGO partners. This forum would serve as a platform for these stakeholders to consider specific issues and solutions concerning regulation of the illegal trade currently being conducted through social media, including how efforts by different parties can be strengthened and synchronized. Viable options for self-policing by social media networks combined with mechanisms for reporting illegal trade to enhance enforcement efforts should be considered, including the establishment of systems to prohibit or suspend social media accounts of repeat offenders. Partnerships between governments, social media companies, international enforcement agencies like Interpol, conservation groups and regulatory institutions such as CITES need to formulate new, realistic solutions to address this uniquely challenging and rapidly evolving method of wildlife trafficking.

RINGKASAN EKSEKUTIF

Pertumbuhan mendadak dan meluas penggunaan media sosial telah memudahkan perdagangan hidupan liar, samada secara sah atau sebaliknya. Facebook merupakan laman jaringan sosial pertama yang memiliki lebih satu billion akaun pengguna, setelah hanya lapan tahun beroperasi. Di Malaysia, lebih daripada 80% pengguna internet dikatakan aktif menggunakan Facebook. Oleh kerana ia popular dan mempunyai skop yang luas, adalah tidak mengejutkan untuk mendapati bahawa Facebook dijadikan saluran untuk mendagangkan hidupan liar secara haram. Ancaman pemerdagangan hidupan liar dalam talian, terutamanya yang terlepas dari dikesan, adalah suatu yang nyata dan relevan, dan keupayaan internet untuk mencapai jutaan pengguna dalam tempoh masa singkat menyukarkan lagi keadaan. Dijangkakan bahawa penggunaan jaringan media sosial dalam talian untuk mendagangkan hidupan liar sedang meningkat. Walaupun wujud laporan mengenai penyalahgunaan internet sebagai pentas perdagangan haram hidupan liar, ternyata ada kekurangan maklumat mengenai aktiviti tersebut di laman yang mempunyai akses terhad. Di mana kajian ini wujud, ianya tidak dapat menghitung skala perdagangan ini dengan menyeluruh.

Oleh kerana itu, TRAFFIC telah menjalankan satu kajian penilaian pantas untuk memantau aktiviti perdagangan hidupan liar dalam 14 buah kumpulan Facebook di Semenanjung Malaysia. Untuk tujuan kajian ini, pemantauan dijalankan selama 30 minit setiap hari sepanjang tempoh lima bulan (November 2014-Mac 2015), atau jumlah keseluruhan selama 50 jam. Kebanyakan kumpulan yang dipantau adalah “Tertutup” (atau *Closed*) iaitu hanya ahli sahaja yang dapat memerhati aktiviti kumpulan. Sepanjang tempoh kajian, terdapat seramai 67 532 pengguna yang aktif dalam 14 buah kumpulan ini, di mana salah satu daripada kumpulan tersebut mempunyai lebih daripada 20 000 ahli.

Secara keseluruhannya, sebanyak 236 pos telah direkod menawarkan penjualan haiwan liar hidup dengan purata 47 pos setiap bulan. Antara 311 dan 380 ekor haiwan daripada 80 spesis telah ditawarkan, di mana burung merupakan kelas haiwan yang mempunyai tawaran penjualan tertinggi (44%), diikuti reptilia (34%) dan mamalia (22%). Hampir separuh daripada jumlah tawaran penjualan adalah salah di sisi-sisi undang-undang, melibatkan 39 spesis yang tidak boleh didagangkan di Semenanjung Malaysia. Kesemua haiwan yang ditawarkan masih hidup dan kadangkala dikatakan sebagai “jinak”, di mana ini menunjukkan kecenderungannya untuk didagangkan sebagai haiwan peliharaan.

Perlindungan antarabangsa

Lapan puluh enam peratus (n=69) daripada semua spesis yang didagangkan sepanjang tempoh kajian adalah dilindungi di bawah Konvensyen Perdagangan Antarabangsa Spesis Terancam Flora dan Fauna (atau lebih dikenali sebagai CITES). Daripada kesemua spesis in, 25 daripadanya adalah spesis bukan asal Malaysia, dimana aktiviti perdagangan bagi spesis tersebut adalah dikawal atau dihalang sama sekali. Sepuluh daripada kesemua spesis yang diperdagangkan, iaitu dengan minimum 24 ekor haiwan, tersenarai di bawah CITES Apendiks I yang melarang sama sekali penjualan komersil spesimen liar yang ditangkap dari habitat semulajadi di peringkat antarabangsa. Daripada angka tersebut, empat spesis mempunyai status Terancam Kritikal (atau *Critically Endangered*), termasuklah Ploughshare Tortoise *Astrochelys yniphora*, yang dianggap sebagai kura-kura yang paling jarang ditemui di dunia, di mana terdapat hanya beberapa ratus ekor individu dewasa di habitat semulajadinya di Madagascar.

Perlindungan Kebangsaan

Sembilan puluh tiga peratus (n=74) daripada semua spesis yang didagangkan sepanjang tempoh kajian adalah dilindungi oleh perundangan di Semenanjung Malaysia. Hampir separuh (49%) daripada semua spesis yang didagangkan memiliki status “Dilindungi Sepenuhnya” di bawah Akta Pemuliharaan Hidupan Liar 2010 yang melarang sebarang perdagangan domestik. Lebih daripada 60% (n=49) daripada semua spesis yang didagangkan adalah spesis asal Malaysia (atau *native*

species). Kajian ini turut menunjukkan tahap perdagangan luar biasa melibatkan 18 spesis mamalia asal Malaysia, didorong oleh permintaan sebagai haiwan peliharaan, koleksi oleh pengumpul atau stok pembiakan. Antara spesis tersebut termasuklah Beruang Matahari *Helarctos malayanus*, Kongkang *Nycticebus coucang*, Ungka Tangan Putih *Hylobates lar* dan Memerang Licin *Lutrogale perspicillata* serta melibatkan antara 83 hingga 101 ekor haiwan. Perdagangan haiwan tersebut adalah dilarang sama sekali di Semenanjung Malaysia.

Permintaan tinggi terhadap haiwan liar asal Malaysia untuk dipelihara, terutamanya spesis yang Dilindungi Sepenuhnya di sisi undang-undang, mungkin adalah penemuan kajian yang paling membimbangkan kerana ia belum pernah direkodkan dalam skala ini. Semenanjung Malaysia tidak pernah ada pasar hidupan liar, di mana perdagangan haram mungkin dapat berlaku. Pasar maya di media sosial kini memudahkan perdagangan haiwan hidup sama seperti pasar sebenar, malah mungkin mampu menawarkan penjualan lebih banyak spesis. Sepanjang tempoh kajian, hanya terdapat satu contoh di mana peniaga menawarkan penghantaran haiwan ke luar negara, dan ini menunjukkan bahawa kebanyakan perdagangan adalah untuk memenuhi permintaan pasaran tempatan.

Pedagang / Peniaga

Terdapat seramai 106 penjual telah memuat naik pos yang mengiklankan penjualan haiwan liar sepanjang tempoh kajian. Kebanyakan spesis tersebut adalah Dilindungi Sepenuhnya daripada perdagangan oleh undang-undang Malaysia, maka penjual telah menjalankan urusaniaga secara haram. Hanya terdapat tiga pos sahaja yang menyatakan penjualan haiwan mempunyai permit dagangan. Daripada 14 buah kumpulan Facebook yang dipantau, satu kumpulan telah menyumbang 115 iklan (hampir 50% daripada jumlah keseluruhan) dengan sekurang-kurangnya 60 penjual memuat naik pos yang menawarkan penjualan sehingga 88 ekor haiwan (anggaran maksima). Pedagang dilihat beroperasi secara bebas, dan tanpa rujukan kepada mana-mana perundangan, pengesahan atau permit adalah jarang. Terlalu sedikit usaha diletakkan untuk menyembunyikan perdagangan haram ini, dan penggunaan kod rahsia atau seumpamanya untuk menerangkan spesis tidak wujud sama sekali.

Penguatkuasaan

Maklumat risikan telah diserahkan kepada agensi penguatkuasa apabila terdapat mana-mana perdagangan yang disyaki dijalankan secara haram. Kesemua laporan tersebut melibatkan enam iklan yang menawarkan pelbagai spesis yang Dilindungi Sepenuhnya, dan tersenarai di bawah CITES Apendiks I. Laporan tersebut juga disertakan dengan maklumat penjual dan aktiviti perdagangan mereka di laman jaringan sosial lain (seperti Instagram). Selain itu, kesemua hasil kajian yang dinyatakan di sini telah dikongsi dengan Jabatan Perlindungan Hidupan Liar dan Taman Negara Semenanjung Malaysia (PERHILITAN) untuk siasatan. Kerjasama antara PERHILITAN dan TRAFFIC masih berterusan.

Walaupun jumlah sebenar perdagangan di media sosial amat mencabar untuk dibanteras, Kerajaan Malaysia telah mengakui akan ancaman ini dan menyalurkan sumber untuk membanteranya, diketuai oleh Unit Jenayah Siber PERHILITAN. PERHILITAN telah bergabung usaha dengan Suruhanjaya Komunikasi dan Multimedia Malaysia (SKMM) untuk menjejak perdagangan haram dalam talian, termasuklah di laman jaringan media sosial. Pada Mac 2015, PERHILITAN telah menjalankan 'Operasi Taring' yang membawa kepada penahanan tujuh orang suspek dan rampasan 64 ekor haiwan berstatus Dilindungi Sepenuhnya, seperti Beruang Matahari dan Kucing Batu *Prionailurus bengalensis*. Kumpulan Facebook yang telah disasarkan dalam operasi itu adalah antara yang dipantau dalam kajian ini. Pada Julai 2015, PERHILITAN juga telah menahan empat individu yang cuba menjual Orangutan Sumatera *Pongo abelii* setelah iklan hebahan penjualan dikesan dalam Facebook.

Dengan adanya hampir 70,000 ahli dalam hanya 14 buah kumpulan di Facebook menggambarkan bahawa perdagangan di media sosial mampu mencapai bilangan pelanggan yang ramai, disamping mempunyai kapasiti untuk berkembang dengan pantas berdasarkan sifatnya yang viral. Pedagang hidupan liar kini jelas lebih cenderung menggunakan kaedah penjualan yang tidak konvensional seperti menggunakan portal laman web dan media sosial untuk mengelak dari dihidu pihak

berkuasa, mendapatkan bilangan pelanggan yang ramai serta memudahkan transaksi dan menjadikannya lebih efisien. Skala dan sifat perdagangan ini menyukarkan penguatkuasaan untuk membanteras kegiatan yang menyalahi undang-undang. Ini tepat kerana kebanyakan daripada aktiviti yang berlaku dalam kumpulan Tertutup adalah terlindung dari pemerhatian masyarakat umum. Memandangkan banyak spesis asal Malaysia yang dilindungi menjadi sasaran oleh pengumpul bagi perdagangan haiwan peliharaan, satu pendekatan yang lebih selaras untuk menangani masalah ini diperlukan. Walaupun hasil kajian ini hanya khusus kepada perdagangan di satu kawasan (Semenanjung Malaysia), hasil kajian mencerminkan kegiatan yang sedang berlaku di peringkat antarabangsa, dan maka dengan itu memerlukan penyelesaian yang bersifat global.

Maka dengan itu, TRAFFIC telah memulakan perbincangan dengan Facebook Asia Pasifik yang telah menyatakan komitmen untuk bekerjasama dengan TRAFFIC untuk membantu menangani perdagangan haram hidupan liar dalam talian, hasil daripada kajian ini. Facebook juga menyatakan bahawa Syarat Perkhidmatan (atau *Terms of Service*) mereka tidak membenarkan penjualan dan perdagangan hidupan liar terancam, dan Facebook tidak teragak-agak untuk menarik keluar isi kandungan yang menyalahi terma tersebut (sekiranya ia dilaporkan dan disahkan). Lain-lain peluang kerjasama untuk menangani isu ini adalah seperti yang dinyatakan dalam cadangan seterusnya:

Jangka Pendek: Memperbaiki Pengesanan

Pertimbangan perlu ada untuk kerjasama lebih baik antara agensi penguatkuasa undang-undang dan Facebook dalam memastikan pesalah yang profilik dan berulang dapat disasarkan secara selaras dan berkesan. Selaras dengan “Panduan Penguatkuasaan Undang-undang” yang ditubuhkan oleh Facebook, ia akan berhubung dengan pihak berkuasa dan memberikan maklumbalas kepada permintaan agensi kerajaan berkenaan kegiatan yang menyalahi undang-undang. Untuk melengkapkan usaha ini, TRAFFIC akan berusaha untuk memudahkan kerjasama antara Facebook dan agensi penguatkuasa undang-undang berkaitan dan badan-badan perundangan di Malaysia, termasuklah jabatan hidupan liar, agensi multimedia, dan polis. Urusan kerjasama yang lebih formal sebegini adalah amat penting agar prosedur Facebook yang sedia ada selaras dengan “Panduan Penguatkuasaan Undang-Undang” digunakan dengan sebaiknya untuk mengatasi jenayah seperti ini. TRAFFIC juga akan bekerja rapat dengan Facebook dan agensi di lain-lain negara yang berhadapan dengan isu perdagangan haram hidupan liar dalam talian.

Jangka Pertengahan: Penglibatan masyarakat

Syarikat sektor swasta yang menggunakan laman media sosial memainkan peranan penting dalam meningkatkan kesedaran masyarakat terhadap isu ini. Selaras dengan itu, syarikat swasta perlu mengancam kegiatan perdagangan haram hidupan liar di laman media sosial agar kegiatan seperti ini dapat dicegah. Selain itu, masyarakat umum yang memasuki laman-laman media ini adalah digalakkan untuk melaporkan kegiatan haram kepada pihak berkuasa, atau mana-mana platform lain. Ketika ini, pemantauan berterusan dan menyeluruh terhadap kegiatan haram di laman media sosial adalah hampir tiada dan masih menjadi satu cabaran kepada penguatkuasa undang-undang di seluruh dunia. Terdapat pelbagai pilihan untuk melaporkan kesalahan yang melibatkan jenayah hidupan liar, seperti:

- i. Melaporkan secara terus kepada agensi penguatkuasa undang-undang di peringkat kebangsaan;
- ii. Melaporkan kepada Facebook: Standard Komuniti Facebook (atau *Facebook's Community Standards*) adalah satu pengakuan tegas mengenai dasarnya terhadap kegiatan-kegiatan haram, termasuklah jenayah hidupan liar dan menyediakan langkah-langkah penyaluran laporan kepada Facebook (https://www.facebook.com/help/181495968648557?ref=community_standards);
- iii. Melaporkan kepada TRAFFIC, termasuklah melalui “Wildlife Witness App” yang boleh dimuat turun untuk Iphone di (<https://itunes.apple.com/us/app/wildlife-witness/id738897823?mt=8>) atau Android di (<https://play.google.com/store/apps/details?id=com.taronga.wildwitness>.) Laporan boleh melibatkan pos, pesanan (atau *message*), kumpulan dan elemen lain yang disyaki menyalahi undang-undang.

Jangka Panjang: Forum khas yang mempunyai penyelarasan

Walaupun dalam kebanyakan kes, pihak berkuasa mampu bertindak terhadap kegiatan haram hidupan liar dalam bidang kuasa mereka, terdapat lebih banyak tindakan yang boleh dilakukan untuk menangani masalah ini dengan lebih berkesan dan efisien. Dengan skala masalah ini di peringkat antarabangsa, TRAFFIC menggalakkan penubuhan sebuah forum khas di peringkat global dan rantau antara badan-badan jaringan sosial, kerajaan, badan-badan antara kerajaan dan badan bukan kerajaan. Forum ini akan menjadi pentas komunikasi untuk semua pihak berkaitan untuk mempertimbangkan isu-isu khusus dan mencari penyelesaian berkenaan kawalan perdagangan haram hidupan liar yang sedang dilaksanakan melalui media sosial, termasuklah bagaimana usaha oleh pelbagai pihak boleh diperkuatkan dan diselaraskan.

Pilihan terbaik bagi pelaksanaan dasar sendiri (atau *self-policing*) oleh jaringan media sosial, ditambah dengan mekanisme untuk melaporkan perdagangan haram untuk meningkatkan usaha penguatkuasaan perlu dipertimbangkan, termasuklah mewujudkan satu sistem untuk menghalang atau menggantung akaun media sosial terhadap pesalah berulang. Kerjasama antara kerajaan, syarikat media sosial, agensi penguatkuasa antarabangsa seperti Interpol, kumpulan pemuliharaan dan institusi pengawalan seperti CITES perlu mencari penyelesaian baru dan realistik untuk menangani kaedah penyeludupan hidupan liar yang mencabar dan pantas berkembang ini.

INTRODUCTION

Malaysia is one of the world's mega diverse countries, ranked 12th in the world, based on the country's richness and endemism (Secretariat of the Convention on Biological Diversity, 2001). According to the International Union for Conservation of Nature (IUCN) Red List of Threatened Species,TM 686 plants and 225 animals in Malaysia are at risk of extinction, with at least 256 of them assessed as Critically Endangered. This places Malaysia third in the list of countries with the largest number of threatened species, behind Ecuador and the United States (IUCN, 2012). Malaysia accounted for six percent of illegal wildlife trade seizures recorded across 101 countries from July 1996 to October 2008, with over two-thirds of the species involved being listed in CITES Appendix I or II. During this period, no less than 191,934 live animals were seized (UNDP-GEF, 2014), comprising both native and non-native species.

Fourteen years ago, Renctas (Portuguese acronym meaning National Network Against the Trafficking of Wild Animals) of Brazil published a report outlining law enforcement challenges from online wildlife crime, including the need to monitor these activities on social network sites (Carrasco *et al.* 2014). In recent years, much of the trade in wildlife has increasingly been moving online, and this appears to be on the rise. The displacement of open wildlife trade from the physical markets to the internet follows similar patterns to many other forms of both legal and illegal trade (Williams, 2001). The growth of social media platforms has created greater access to goods and services, which allows the space and opportunity for cybercrime to expand, across all crime types, and allows for a great deal of anonymity. Singapore reportedly recorded an increase of 400% in cybercrime in 2013, due to the ease and accessibility the internet offers (Muzliza, 2014). As many as 30 Malaysians reportedly fall victim to cybercrime daily, with fraud and intrusion being the most common cases (Cheng, 2015). A 2013 United Kingdom Home Office Select Committee Report highlights that access to the internet and the technology, with all its opportunities and benefits, has the ability to put businesses and families at increasing risk of exploitation and internet-based crime (UK Parliamentary, 2013). Cybercrime extends to wildlife trade, and is a rising threat to many species' survival.

Given the accessibility of the internet, changes and trends can occur very rapidly; the internet provides a network that can adapt and facilitate these changes in a unique manner. To date, little research has been undertaken to examine the prevalence of wildlife trade occurring in Closed groups on social media and password-protected online forums. Previous research has largely focussed on wildlife trade occurring on openly accessible platforms such as commercial trade portals and online auction sites (IFAW 2008, 2014), which lend themselves to public monitoring. The threats posed by closed methods of trade are not fully understood and the extent to which these methods are used remains largely unknown. Stronger enforcement efforts and greater awareness of illegal wildlife trade have contributed to some aspects of this criminality moving underground, due to the increased risk of detection in traditional open markets and retail outlets.

Earlier research has hinted at the presence of online wildlife crime. In 2009, preliminary studies on internet-based trade in Malagasy wildlife, recorded 94 tortoises being offered for sale across 10 countries, comprising all four of Madagascar's Critically Endangered and CITES Appendix I listed species (Walker, 2011). In early 2014, another research study over a six week period found over 33,000 endangered wildlife, its parts and products from species listed in CITES Appendix I and II available for sale online in 9,482 advertisements in 16 countries; 54% of the advertisements were for live animals (IFAW, 2014). The study also focused on China and found that social media was the most commonly used method of contact between buyers and sellers (64% / 1,355), primarily via "QQ" or "WeChat".

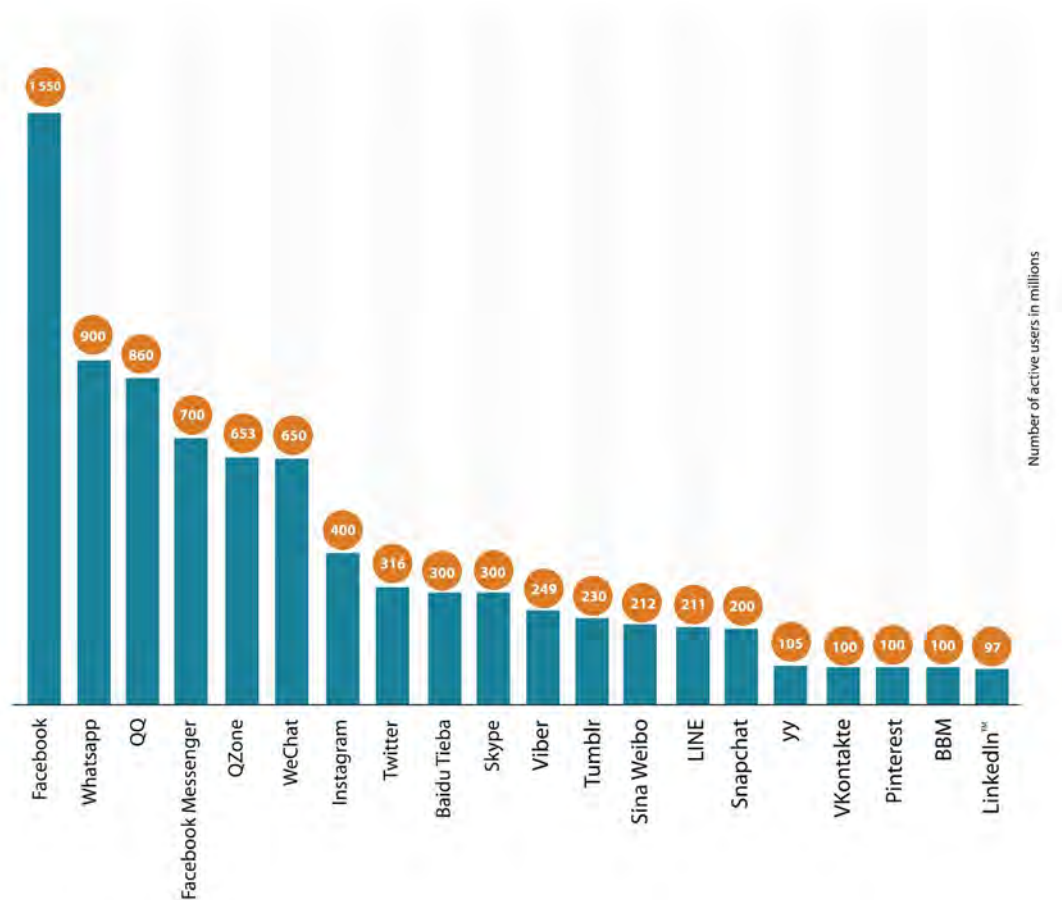
In response to the emerging issue of online wildlife crime, some popular online platforms have taken proactive preventive steps:

- In 2009, eBay banned the sale of all ivory items on its worldwide platform.
- In June 2012, in collaboration with TRAFFIC, 15 of the leading e-commerce sellers operating in China, including Alibaba, Taobao and Tencent signed a declaration stating their zero-tolerance policy towards their services being used to conduct illegal trading. The statement further compels traders to comply with all aspects of China's CITES-implementing legislation. Online site Etsy followed suit and banned all wildlife products from its site in 2014 (<https://www.etsy.com/legal/prohibited/>). Most of these efforts have so far been confined to commercial trade portals.
- In November 2015, Tencent and TRAFFIC signed a strategic Memorandum of Understanding (MoU) on tackling illegal wildlife trade carried out through WeChat and Tencent's other platforms. This MoU includes collaboration on public education with the aim of dissuading WeChat and Tencent users from engaging in illegal wildlife trade.

POPULARITY OF SOCIAL NETWORKING AND ITS USE FOR WILDLIFE TRADE

As of November 2015, over 7.5 billion social media users were recorded globally on at least 18 major social networking sites (based on the number of active accounts), the highest of which is Facebook with over one billion registered accounts (<http://www.statista.com/topics/1164/social-networks/>) Figure 1). Facebook itself reports that it has recorded 1.04 billion daily active users on average for December 2015, 84% of whom are users outside the United States and Canada (www.newsroom.fb.com).

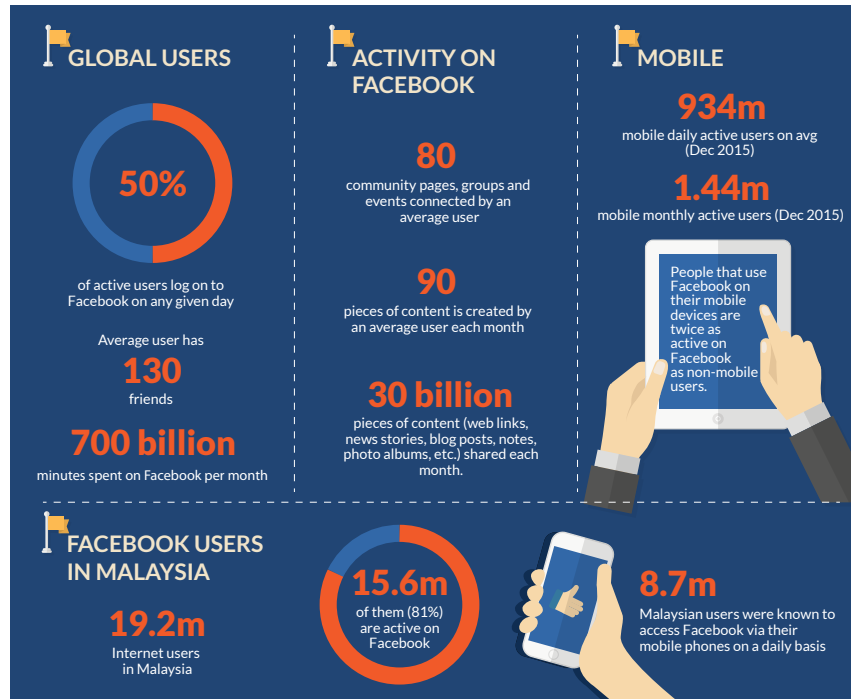
Figure 1: Leading Social Networks Worldwide as of November 2015



Source: © Statista 2016

The most popular social media sites in Malaysia are reported to be Facebook, Google, YouTube and Yahoo, with Facebook being the most heavily used (Baskaran, 2014). A 2013 Industry Performance Report by the Malaysian Communications and Multimedia Commission (MCMC) found that of the 19.2 million internet users in Malaysia, 15.6 million (81%) are active on Facebook, placing Malaysia 8th in Asia and 21st in the world (MCMC, 2014; Norni 2013). The report also found that in 2014, more than 8.7 million Malaysian users were known to access Facebook via their mobile phones on a daily basis. Malaysians spend an average of five hours online daily, and three out of these five hours are spent on social media (Muzliza, 2014). Mobile phones facilitate the ease and speed with which wildlife trade can take place and photos of the offered species can be taken on a phone and uploaded instantly to Facebook. Figure 2 provides a summary of Facebook users both globally and in Malaysia.

Figure 2: Summary of Facebook Users Globally and in Malaysia



Facebook's Community Standards provides a clear policy concerning the content of posts and instructs users to report any misuse directly to Facebook (<https://www.facebook.com/communitystandards>). Under its "Helping to Keep you Safe" category, criminal activity is a key thrust, where the use of Facebook to facilitate or organize criminal activity is prohibited. Towards this end, Facebook works with law enforcement agencies to address these concerns where the risks are genuine.

One of the more popular platforms are "Facebook groups", a dedicated space that allows like-minded people to come together for a common and often specific interest. A Facebook group allows three privacy options for users; Public, Closed and Secret. Table 1 provides some of the differing privacy settings for Facebook groups.

Table 1: Privacy Settings for Facebook Groups

Type of Group	Public	Closed	Secret
Who can join?	Anyone can join or be added or invited by a member	Anyone can join or be added or invited by a member	Anyone, but they have to be added or invited by a member
Who can see what members post in the group?	Anyone	Only current members	Only current members
Who can find the group in search?	Anyone	Anyone	Current and former members

Source: <https://www.facebook.com/help/220336891328465>

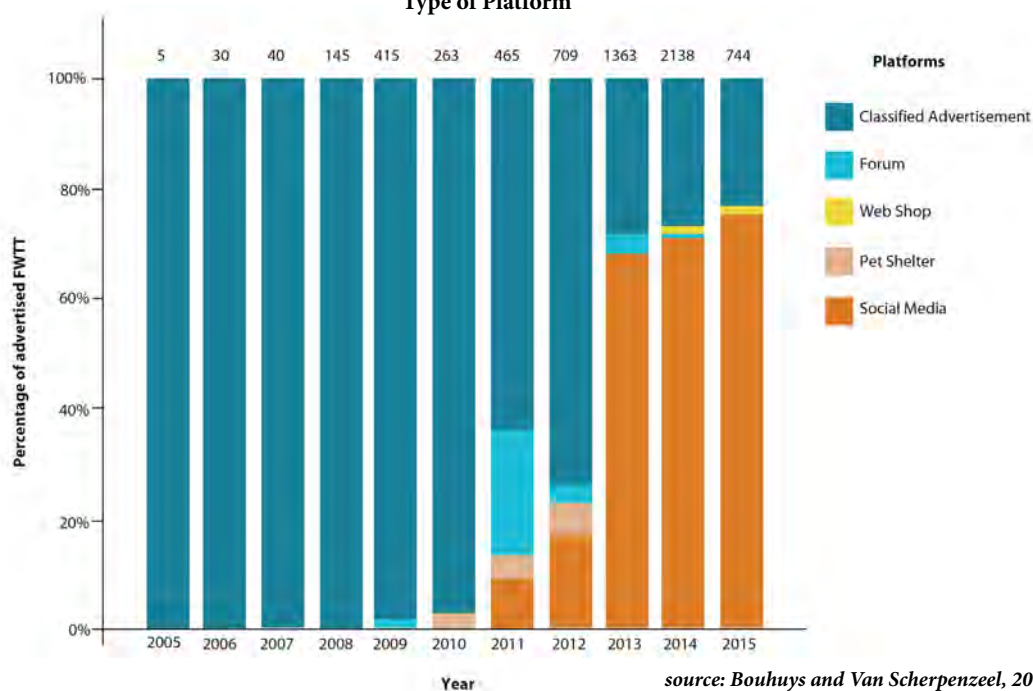
One possible reason why social media platforms such as Facebook are preferred over commercial trade platforms such as eBay or other forms of classified advertisements, may be because it can be conducted free of charge. In addition, platforms such as Facebook groups provide a layer of control and accessibility that can be limited by those managing the group. Social network sites such as Facebook and specialist forums allow wildlife trade to occur, both through legal and illegal means, either directly by enabling trade exchanges or indirectly where discussions around the species in trade have been taking place (Stoner and Nijman, 2014). Most credible businesses and organizations now have Facebook pages that have grown to become the chosen platform for conducting various businesses, including trade.

Research carried out over one month in March 2014 in China by TRAFFIC, examining the use of social media to sell wildlife products, found thousands of worked ivory products, including over 115 elephant tusks, over 276 ivory segments, at least 77 whole rhino horns or pieces and at least 46 Helmeted Hornbill *Rhinoplax vigil* casques for sale (Yu and Jia, 2015). In February 2015, a wildlife trader who was suspected to be part of a smuggling ring was arrested in Medan, Indonesia during a transaction involving a juvenile Sumatran Orangutan. The trader was alleged to have been running his operations through Facebook and BlackBerry Messenger, involving a range of other species including Asiatic Golden Cats *Catopuma temnickii*, hedgehogs, slow lorises, gibbons, hornbills and crocodiles (Wildlife Conservation Society, 2015). In July 2015, a trader from the United States confirmed that he was willing to ship Totally Protected Bornean endemic Earless Monitor Lizards *Lanthanotus boreneensis* to Canada, yet to date no permit has been issued by any authority in Borneo for the collection or trade of this species (Stoner and Nijman, 2015).

In Malaysia, online surveys carried out by TRAFFIC between November 2014 and February 2015 found at least 63 advertisements on Facebook for Totally Protected Indian Star Tortoises *Geochelone elegans* (Chng and Bouhuys, 2015). Enquiries undertaken by a leading Malaysian newspaper, The Star, in July 2015, showed that wildlife such as slow lorises, Indian Star Tortoises and Ball Pythons *Python regius* are openly posted for sale on Facebook and on other commercial platforms such as www.adpost.com.my and www.mudah.my, both of which are Malaysian-based (Sukumaran, 2015). These transactions were said to be carried out via email or WhatsApp (a mobile messaging application which is a subsidiary of Facebook), while the animals could either be delivered in person, or via the post.

Another study on the trade in freshwater turtles and tortoises in Malaysia found that a majority of the trade conducted online shifted from commercial web portals to social media at the beginning of 2012 (Bouhuys and Van Scherpenzeel, 2015). All online advertisements documented within the period of 2005-2008 were found on classified advertisement websites, after which these advertisements spread out to forums, and pet shelter groups. In 2011 and 2012, however, social media emerged, accounting for approximately 10% to 18% of the online trade, though these numbers shot up to almost 70% in 2013, and continued to increase (Figure 3).

Figure 3: The Distribution of Freshwater Turtles and Tortoises Advertised Online in Percentage, by Year and Type of Platform



LEGISLATION IN MALAYSIA

Wildlife Conservation Act 2010

The primary legislation protecting wildlife in Peninsular Malaysia is the Wildlife Conservation Act 2010 (WCA). The WCA is a strong legislative tool that covers a wide range of issues and provisions including hunting, animal welfare, trade and possession of animals and/or products that (are claimed to) contain derivatives of wild animals. Over 2000 species are afforded protection, with each of them divided into one of seven different categories known as “Schedules”. These Schedules essentially govern how wildlife is protected and used. Species with the highest level of protection are considered “Totally Protected”; these species cannot be hunted, traded or used, unless a special permit is granted by the Director-General of PERHILITAN. Any violation of this clause carries a maximum fine of MYR500 000 (USD134 800) and a jail term of up to five years. Additional clauses for a crime relating to a female or juvenile animal are also provided, which carry a heavy penalty of a minimum fine of MYR150 000 (USD40 440) or a maximum fine of MYR500 000 (USD134 800), or prison term of up to ten years, or both.

The second level of protection is generally used to regulate species that are allowed to be hunted and traded. These are considered “Protected” species. Protected species can only be harvested or traded with a valid licence from PERHILITAN. Any violation of clauses concerning Protected species, including immature or juvenile Protected specimens, carries a maximum fine of MYR100 000 (USD26 960) or five years imprisonment, or both. The law also carries provisions for persons involved in hunting and those who keep over 20 birds of selected Protected species. Violation carries a minimum fine of MYR20 000 (USD5 390) and maximum fine of MYR50 000 (USD13 480) or a jail term not exceeding three years, or both.

International Trade in Endangered Species Act 2008

Malaysia has been a Signatory to CITES¹ since 1978 and is classed as Category 1 (generally meeting CITES requirements) in the CITES National Legislation Project (CITES Resolution Conf. 8.4 (Rev.CoP15)), which assesses Parties on their readiness to take appropriate measures to enforce provisions of the Convention and to consider appropriate compliance measures. Towards this end, the International Trade in Endangered Species Act 2008 (INTESA) was created. This legislation is perhaps the strongest in the Southeast Asian region. It governs the import and export of wildlife, with penalties for those violating the legislation reaching a maximum aggregate of MYR2 million (USD539 220), or a prison term of maximum seven years. Species in the Act are categorized according to three “Schedules”, which are consistent with their listing in CITES Appendix I, II and III.

Communications and Multimedia Act 1998

The regulation of communications and multimedia platforms, including social media, is governed by the MCMC. Its powers are vested in the Communications and Multimedia Act 1998. Although the Commission is charged largely with overseeing the regulatory framework for telecommunications and broadcasting industries, its remit also extends to online activities and mobile services. At any point, the Commission may investigate any reported complaints if it has grounds to believe that a civil or criminal offence is being or will be committed under this Act or its subsidiary legislation. This effectively means that the Commission has the power to investigate any wildlife trade violations occurring on online platforms, including on social media.

¹ CITES is an international treaty that governs wildlife trade to protect species from over-exploitation and importantly, to prevent species from becoming endangered or extinct because of international trade. Species are listed in one of three appendices:

Appendix I comprises species threatened with extinction and provides the greatest level of protection. International trade for primarily commercial purposes is essentially prohibited. Appendix II is composed of species that, although currently not threatened with extinction, may become so without trade controls.

Appendix III are species listed at the request of a particular country that intends to place stricter regulation to prevent unsustainable or illegal exploitation; international trade is only permitted through appropriate permits.

Convictions under this Act carries a fine of up to MYR500 000 (USD134 800) or five years imprisonment, or both.

To gain some insight into the level of illegal wildlife trade occurring on social networking sites, this assessment was undertaken to specifically monitor pre-determined Facebook groups. A number of these groups were Closed and therefore only accessible by accepted members of that group. Essentially any posts appearing on Closed groups' feeds cannot be viewed by the general public, only members can view activity on that page and have to be or added by an existing member of that group. This rapid assessment allowed TRAFFIC a rare opportunity to investigate the level of trade occurring within such groups and the dynamics of this method of trade.



Photo 1: The White-crested Laughing thrush *Garrulax leucolophus*, threatened by the trade for songbirds, was among the many birds offered for sale.

METHODOLOGY

From November 2014 to March 2015, the activity of 14 groups on Facebook, consisting of both Public and Closed groups (Table 1) were monitored. TRAFFIC was able to tap into resources through parties who already had access to these groups. These groups were selected as they were previously identified as hosting posts where wildlife was being offered for sale. During the assessment period, all posts where wildlife was being offered for sale (irrespective of their protection level or status) were documented.

To render the number of individuals offered for sale reliable, a count for the minimum and maximum number was compiled. For example, one seller trading in one species posted an offer for sale on three separate occasions (text below, verbatim):

- “4 months up, feeds on boiled chicken, healthy and a bit aggressive, 2 male and 2 female, RM650 per cat (posted on 03.12.2014)
- “RM980, more than 3 weeks old, still feeding on milk, whatsapp for dealing” (posted on 08.12.2014)
- “Interested? 3 years old, feeds on boiled chicken, healthy and active” (posted on 17.02.2015)

The above is therefore calculated as three advertisements, one seller and a minimum of five and a maximum of six individual animals. To avoid inflation of the number of individuals observed for sale during the period reviewed, care is taken to describe minimum counts in the analysis and discussion, unless stated otherwise.

Each offer of sale posted by each seller was reviewed and the number of individuals were tallied based on the images provided and / or the text contained in the post. An attempt to verify individuals was made where species were offered for sale more than once, to reduce the risk of double counting individuals offered for sale by the same seller (as described above). Each species found in trade was counted: 1) to establish how often they featured in separate adverts, and 2) the number of times they were offered by individual sellers. An accumulative total of the estimated minimum and maximum individuals these posts represented was also calculated (Table 2).

Table 2: Methodology Used to Identify Minimum Number of Individuals in Trade

Scientific name	Common Name	No of Advertisements	No of unique sellers	Minimum number of individual animals	Maximum number of individual animals
<i>Prionailurus bengalensis</i>	Leopard Cat	24	16	27	42

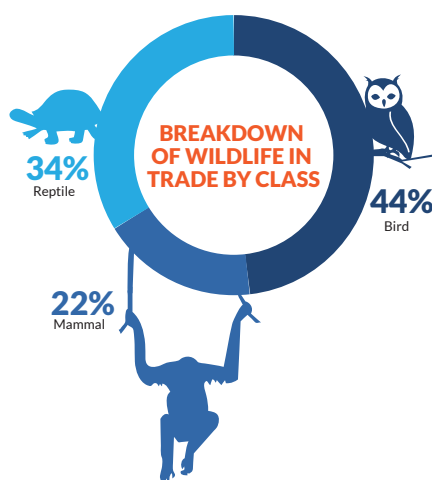
All findings from this assessment were shared with PERHILITAN following completion of the assessment. Time-critical information deemed relevant for law enforcement was reported to the authorities for further investigation and /or action. A conversion rate of 1 MYR = 0.2996 USD (as on 31 March 2015 (<http://www.oanda.com/currency/converter/>)) was used to carry out currency conversions in this report.

ASSESSMENT RESULTS

In total, 236 individual posts were documented in which wildlife was being offered for sale, averaging 47 posts per month. Most posts offered only one species for sale (n=232 / 97%); a lesser number of posts advertised more than one species for sale (n=7 / 3%). A full inventory of species found for sale is provided in Annex 1.

In total, of those 236 posts, a minimum of 311 and a maximum of 380 individual animals were observed for sale. This involved a total of 80 species, including birds (n=35), followed by reptiles (n=27) and mammals (n=18) (Figure 4). All animals offered for sale were live, signifying that sales on Facebook was exclusively to service the pet trade.

Figure 4: Breakdown of Wildlife Traded by Class



Species Found In Trade – Global Protection

Almost all species found in trade are CITES listed, with a majority of the species offered for sale being CITES Appendix II listed (Table 3). Ten CITES Appendix I listed species were observed for sale, with close to 80% (4) of these assessed as either Critically Endangered or Endangered on the IUCN Red List². The Sunda Slow Loris *Nycticebus coucang* was the most common CITES Appendix I listed species offered for sale (Figure 5). Reference to licences was rare; of the 236 posts, only three advertisements involving CITES Appendix II listed species mentioned that the animals were accompanied by licences, while none of the posts described or alluded to the necessary permits. However, three advertisements did state that they had licences, although the type was not specified.³

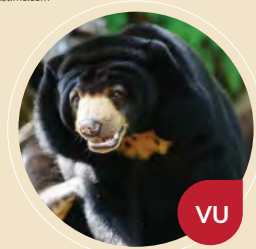
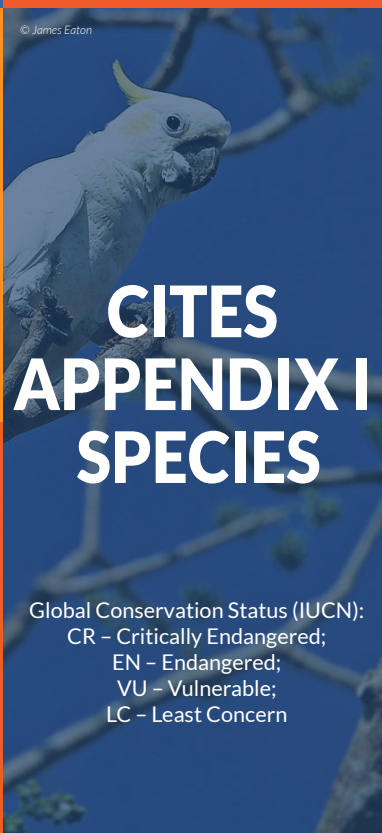
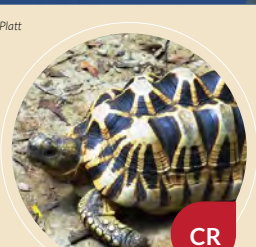
Table 3: CITES Status of Species Offered for Sale

CITES Appendix Listings	Number of Species	% of total
Appendix I	10	13
Appendix I/II	2	3
Appendix II	52	65
Appendix III	5	6
Non CITES	11	14
Total	80	100

²The IUCN Red List of Threatened Species™ is widely recognized as the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species.

³Licences refer to; Hill Myna *Gracula religiosa* (App. II), African Grey Parrot *Psittacus erithacus* (App II), Ducorps's Cockatoo *Cacatua ducorpsii* (App. II)

Figure 5: CITES Appendix I Species Offered for Sale on 14 Facebook Groups in Peninsular Malaysia from November 2014-March 2015

© KAI/Nekaris  VU Sunda Slow Loris <i>Nycticebus coucang</i> Min no of individual animals offered for sale: 9 Native to Malaysia: Yes	© Tommy Fabianus/ Dreamstime.com  LC Palm Cockatoo <i>Probosciger aterrimus</i> Min no of individual animals offered for sale: 3 Native to Malaysia: No	© Dreamstime.com  VU Sun Bear <i>Helarctos malayanus</i> Min no of individual animals offered for sale: 2 Native to Malaysia: Yes
© Jim Sanderson  EN Flat-headed Cat <i>Prionailurus planiceps</i> Min no of individual animals offered for sale: 2 Native to Malaysia: Yes	© James Eaton  CITES APPENDIX I SPECIES Global Conservation Status (IUCN): CR – Critically Endangered; EN – Endangered; VU – Vulnerable; LC – Least Concern	© TRAFFIC  CR Yellow-crested Cockatoo <i>Cacatua sulphurea</i> Min no of individual animals offered for sale: 2 Native to Malaysia: No
© Chris R. Shepherd/TRAFFIC  CR Radiated Tortoise <i>Astrochelys radiata</i> Min no of individual animals offered for sale: 2 Native to Malaysia: No		© Bidouze Stéphane/ Dreamstime.com  EN White-handed Gibbon <i>Hylobates lar</i> Min no of individual animals offered for sale: 1 Native to Malaysia: Yes
© Kanitha Krishnasamy/ TRAFFIC  CR Ploughshare Tortoise <i>Astrochelys yniphora</i> Min no of individual animals offered for sale: 1 Native to Malaysia: No	© Kalyar Platt  CR Burmese Star Tortoise <i>Geochelone platynota</i> Min no of individual animals offered for sale: 1 Native to Malaysia: No	© Peter Paul van Dijk  EN Big-headed Turtle <i>Platysternon megacephalum</i> Min no of individual animals offered for sale: 1 Native to Malaysia: No

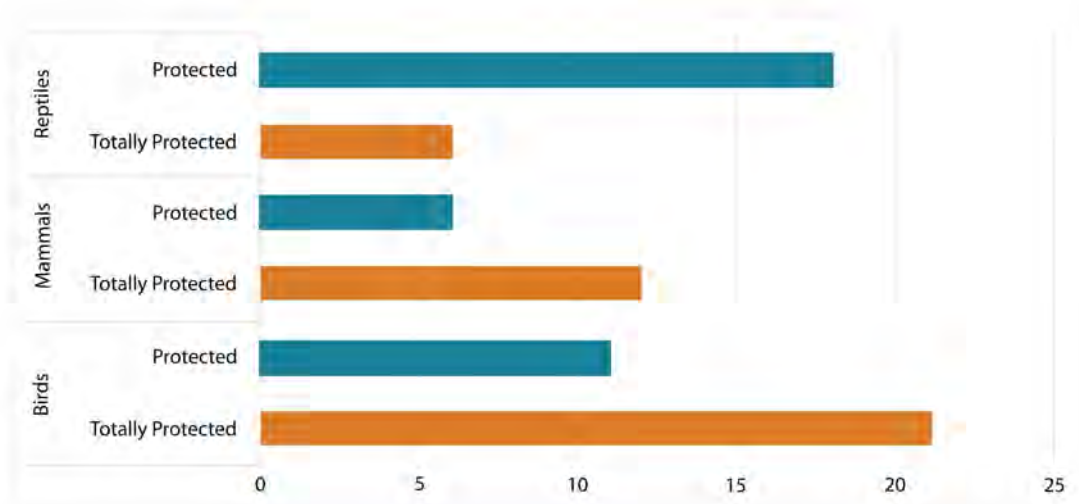
Species Found In Trade – National Protection

The majority (n=74 / 93%) of species that were advertised for sale have legal protection in Peninsular Malaysia. More than half of these (n=39), comprising both native and non-native species are considered Totally Protected under Malaysian law through the WCA, which means that any trade in these animals is prohibited (Figure 6). These were offered for sale in at least 160 Facebook posts, involving a minimum of 185 animals, 60% of which comprised birds and mammals (Figure 7). Another 35 species (amounting to a minimum of 119 animals) are afforded Protected status by the WCA, where legal trade is permitted through the acquisition of valid licences. A further six species are not listed under the WCA (consisting of a minimum of eight animals).

Figure 6: Proportion of Species Offered for Sale and Their Protection Status Under the Wildlife Conservation Act 2010



Figure 7: Breakdown of Protection Level by Species Groups According to the Wildlife Conservation Act 2010



A summary of the six most frequently featured species, comprising five birds and one mammal species, is described in Figure 8. This includes one CITES Appendix I listed species and five species that are Totally Protected in Peninsular Malaysia. Collectively, these six species were offered by at least 38 unique sellers (36% of total), featured in one third (79) of all the posts, and account for 43% (134) of the total number of individual animals found for sale.



Photo 2: Heavily traded native species included the Sunda Slow Loris, seen in the post above.



Photo 3: Non-native species like this Pig-nosed Turtle were also offered for sale.

Profile of Common Species Observed in Trade

The six most commonly offered species are examined more closely, along with an example of the posts they featured in, Figure 8.

Figure 8: Profiles of the Six Most Commonly Featured Species Offered for Sale



04

Barn Owl

Tyto alba

» Native to Malaysia
CITES Appendix: II
WCA Status: Totally Protected
IUCN Status: Least Concern
Average Price: USD78

Distribution & Population

Often described as the most widely distributed species of owl, and has an extremely large range. The species is currently assessed as being of Least Concern by IUCN.

Historic and Present Status in Trade

In Peninsular Malaysia, their emergence for the wild meat trade in large volume was reported in 2008 when PERHILITAN seized almost 900 owls (Anon, 2008; TRAFFIC 2012). The emergence of Barn Owl consumption for the wild meat trade was unheard of in Peninsular Malaysia prior to these seizures, and it now appears that it is also being sought after for the pet trade in Malaysia, as has been observed elsewhere in the region such as Indonesia and Thailand (Profauna, 2009; Shepherd, 2012).

Survey Findings

Between 21 - 29 individual animals were advertised for sale on Facebook during the survey period, involving nine unique sellers and featured in 12 posts.



Salam..ada yang minat dgn barn owl???ada 2 ekor..berminat boleh PM..ready stock

Greetings...anyone interested in a barn owl...???there are two...interested please PM me...ready stock

Distribution & Population

Trade, acting in conjunction with habitat loss throughout the species' range, appears to have seriously impacted this species, with significant population declines due to trade noted in China, Indonesia, Peninsular Malaysia, Thailand (all major declines), the Philippines, and parts of India and Laos (BirdLife, 2015). Despite these, the species is currently assessed as being of Least Concern by IUCN.

Historic and Current Status in Trade

The Hill Myna is one of the most popular avian pets in Asia, from 1994-2003, over 170,000 wild-caught individuals were exported from range states (Birdlife, 2015).

During a three-day assessment in three of Jakarta's largest bird markets, 128 animals were observed for sale (Chng *et al.*, 2015). In December 2015, Indonesian authorities seized 557 Hill Mynas packed in plastic baskets in East Java that were suspected to be smuggled from Kalimantan, destined for Jakarta's bird markets for the pet trade (Anon, 2015). In Malaysia, this trade is also reported to be largely domestic; in 2012, PERHILITAN registered 2551 Hill Mynas being kept as pets (CITES, 2006; PERHILITAN, 2012).

Survey Findings

In Peninsular Malaysia, the hunting (trapping)



Tiong mas utk dijual..area zoo negara n taman melawati..pandai buat mcm2 bunyi n bcakap skit..rm600..

Hill myna for sale...national zoo area and melawati park area...makes all sorts of noises and talks a little...MYR600..

of the species is allowed, and controlled through a licensing system. Open season for hunting (trapping) the species is from 1 July - 31 December. At least 39 animals were advertised for sale in nine posts, involving nine unique sellers - 14 of these animals were advertised for sale during this period, while the advertisement of another 25 animals fell outside this period, all by a single Facebook group.

05

Hill Myna

Gracula religiosa

» Native to Malaysia
CITES Appendix: II
WCA Status: Protected
IUCN Status: Least Concern
Average Price: USD105

06

Sunda Slow Loris *Nycticebus coucang*

» Native to Malaysia
CITES Appendix: I
WCA Status: Totally Protected
IUCN Status: Vulnerable
Average Price: USD156

Distribution & Population

The Sunda Slow Loris is native to Indonesia, Peninsular Malaysia, Singapore and Thailand. Studies on the species in Indonesia and Peninsular Malaysia generally point to a low population density. Therefore, large-scale collections from the wild is likely to be detrimental to the long-term survival of the species. The species is currently assessed as being Vulnerable by IUCN, with trade being a major threat to the species.

Historic and Current Status in Trade

The species is collected for use as pets, and the animals are sold throughout Southeast Asia (IUCN, 2015). Surveys conducted in bird markets in Java from May and June 2009 found Sunda Slow Lorises to be the most common primate seen in trade, with at least 45 animals offered for sale in eight markets (Profana, 2009).

The large volume of trade has led to the conclusion that *Nycticebus* species are not common enough to withstand the current level of off-take, being the number one protected species encountered during many in-country animal market surveys (Nekaris and Nijman, 2007).



Greetings, sorry, admin ran out of topic, for release to a new owner too busy with work, no time to play, semi-tame - anything, please whatsapp....

Survey Findings

At least 9 animals were advertised for sale in eight posts, involving eight unique sellers.

Sellers

During the assessment, 106 unique individual sellers (with one operating as both an individual and a shop) were identified from the 236 posts offering wildlife for sale (Table 4). In addition, five “shops” were documented, featuring at least 34 posts; however, it is not known whether these shops also have physical outlets or only operate online.

Table 4: Seller Types

Seller Type	Individual	Shop	Individual & Shop	Total
Number	105	4	1	110
Proportion of Posts (%)	86%	6%	8%	100%

Eight sellers dominated trade on the pages monitored, accounting for 43% (102) of posts and almost half of the animals offered for sale (48% / 148). A brief summary of the trade activity involving these most active sellers is provided in Figure 9.

Figure 9: Summary of the Trade Activity Profiles of Eight Key Sellers

SUMMARY OF THE TRADE ACTIVITY PROFILE BY EIGHT KEY SELLERS				
PREDOMINANT WILDLIFE TYPE FOR SALE				
Seller	Key Species Traded & Current Protection Level (WCA 2010)	Typical CITES Listing	Volume of animals	Number of Adverts
1	Birds: [Black-shouldered Kite: Totally Protected] [Brahminy Kite: Totally Protected] [Blyth's Hawk-Eagle: Totally Protected] [Brown Wood-owl: Totally Protected] [Barred Eagle-owl: Totally Protected] Three mammals: [Banded Linsang: Totally Protected] [Black Giant Squirrel: Totally Protected] [Lesser Mousedeer: Protected]	CITES Appendix II	30 individuals	23
2	Birds: [Blue-crowned Hanging-Parrot: Protected] [Black-shouldered Kite: Totally Protected] [Blue-and-gold Macaw: Not native to Malaysia] [Leopard Cat: Totally Protected] Mammals: [Slow Loris: Totally Protected] [Dusky Leaf-monkey] [Pig-tailed Macaque: Protected]	CITES Appendix I & II	52 individuals	19
3	Reptiles: [Green Tree Python: Not native to Malaysia] [Burmese Python: Not native to Malaysia] [Blood Python: Totally Protected] [Ball Python: Not native to Malaysia] [Common Iguana: Not native to Malaysia] [Pig-nosed Turtle: Not native to Malaysia]	CITES Appendix II	12 individuals	13
4	Birds: [Eurasian Sparrowhawk: Totally Protected] [Green Pigeon: Totally Protected] [Barn Owl: Totally Protected] [Crested Serpent-eagle: Totally Protected] [Black-shouldered Kite: Totally Protected] [Brahminy Kite: Totally Protected] [Brown Hawk-owl: Totally Protected] [Barred Eagle-owl: Totally Protected] One reptile: [Oriental Whip Snake: Protected]	CITES Appendix II	12 individuals	11
5	Birds: [Asian Crested Goshawk: Totally Protected] [Black-shouldered Kite: Totally Protected] [Blyth's Hawk-Eagle: Totally Protected] [Brahminy Kite: Totally Protected] [Changeable Hawk-Eagle: Totally Protected] [Crested Serpent-eagle: Totally Protected] One reptile: [Monocled Cobra: Protected]	CITES Appendix II	9 individuals	11
6	Birds: [Brahminy Kite: Totally Protected] [Barn Owl: Totally Protected] [Crested Serpent-eagle: Totally Protected] [Crested Serpent-eagle: Totally Protected] One mammal: [Banded Langur: Protected]	CITES Appendix II	20 individuals	8
7	Mammals: [Leopard Cat: Totally Protected] [Dusky Leaf Monkey: Protected] One Reptile: [Tokay Gecko: Protected]	CITES Appendix I/II	7 individuals	6
8	Mammals: [White-handed Gibbon: Totally Protected] [Pig-tailed Macaque: Totally Protected] [Malayan Sun Bear: Totally Protected]	CITES Appendix I & II	6 individuals	6

DISCUSSION

The Live Pet Trade

All posts documented during the assessment period concerned live animals. Many of the species offered for sale are typical of what has historically constituted pets (cockatoos, parrots and snakes for example), and therefore are frequently sold in typical pet stores. However, this assessment unveils a trend in the sale of high profile and threatened mammals as pets, species that are otherwise not permitted in trade locally, nor easily available. This includes 18 native mammal species such as the Sun Bear, Sunda Slow Loris, White-handed Gibbon and Smooth Otter *Lutrogale perspicillata*, and involves a minimum of 83 and a maximum of 101 animals for which trade is strictly prohibited in Peninsular Malaysia.

Figures 10, 11 and 12 provide screenshot examples of the posts in which live juvenile mammals were offered for sale. The identified demand for native wild animals as pets is one of the most significant and concerning findings of the assessment. Trade in such species has not previously been documented on this scale in Peninsular Malaysia; the notion being that this demand may have always existed. However, Peninsular Malaysia has never historically had open physical markets offering threatened mammals for sale, which has served to hinder the progression of this demand and subsequent trade, unlike countries such as Thailand, Indonesia and Myanmar (Shepherd and Nijman, 2007; Shepherd and Nijman, 2008; Chng *et al.* 2015). The emergence of social media has created a platform for illegal trade in Peninsular Malaysia in the form of a virtual marketplace, enabling this trade. The terms “baby” and “juvenile” appeared in 37 and two posts respectively, signifying a demand for young animals, and therefore a constant collection pressure on young animals sought for this trade. The rapid turnover of stock, illustrated by the high frequency of young animals observed in trade, is also of concern as this indicates a continual supply of animals required to feed demand. The source of the animals was not described in any of the documented posts, however, references were made to some individuals being “tame”; again confirming that the sales are occurring primarily for the pet trade. Given the composition of the species observed, most if not all of the animals were undoubtedly sourced from the wild.



Figure 10: White-handed Gibbon for sale in November 2014



Figure 11: Sun Bear for sale in January 2015



Figure 12: Banded Langur for sale in February 2015

Native vs Non-Native Species in Trade

Most of the species found for sale ($n=49$ / 61%) during the assessment are native to Malaysia, involving a minimum of 254 animals. However, 31 species comprising only birds and reptiles are not native to the country. Of these, 81% ($n=25$) are listed in either one of the three CITES Appendices and governed by Malaysia's CITES Act. This effectively means that for these animals, involving a minimum of 50 individuals, legal trade is only permitted where a valid CITES permit has been acquired. However, as noted earlier, any references to licences was rare.

More specifically, of the ten CITES Appendix I listed species found for sale during the assessment (Figure 5) the six reptile and four bird species are not native to the country, with at least 10 individuals being offered for sale. This includes at least two Critically Endangered Yellow-crested Cockatoos *Cacatua sulphurea* (Figure 13). This species is endemic to Indonesia and Timor-Leste where it is Totally Protected by law yet it has undergone a dramatic population decline due to the illegal domestic and international pet trades, and is now extinct, or near extinct in the wild, throughout its range (BirdLife, 2015).

This similarly applies to the Critically Endangered Ploughshare Tortoise *Astrochelys yniphora* and Radiated Tortoise *Astrochelys radiata*, both species endemic to Madagascar. International trade in these tortoises is known to pose a direct threat to their survival exemplified recently in October 2015, when 763 Radiated Tortoises and eight Ploughshare Tortoises were seized by Customs at Antananarivo Airport in Madagascar en route to Malaysia's capital, Kuala Lumpur (Lee, 2015; TRAFFIC, 2015). Such incidents illustrate how non-native species are being smuggled into Malaysia, in direct violation of Malaysia's CITES Act which carries a maximum fine of MYR2 million (USD460 500) and seven years jail if convicted.

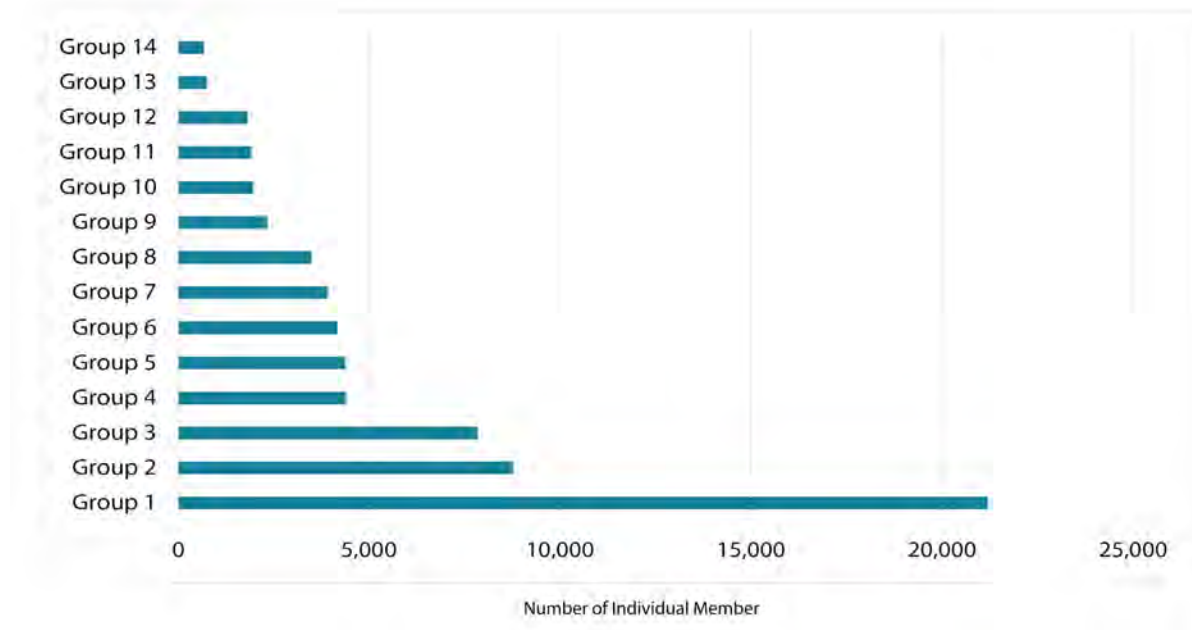


Figure 13: Yellow-crested Cockatoo for sale in November 2014

Groups

The assessment's parameters concentrated exclusively on 14 Facebook groups, pre-selected due to a high level of wildlife trade occurring on those pages. During the time of the survey, a minimum of 67 532 individuals formed the membership of all 14 groups; one particularly large group had 21 190 members (Figure 14).

Figure 14: Number of Individual Members of the 14 Facebook Groups



During the course of the assessment, at least one of these groups was known to have changed its name, due to governmental vigilance and successful enforcement actions under “Operation Taring”. One key group disproportionately accounted for 115 posts (close to 50% of the total); this group had the second highest membership of almost 9000 members. At least 60 unique sellers posted advertisements on this page, accounting for a maximum of 88 animals being offered for sale. The scale of activity and the high number of sellers featured here is therefore likely to yield information of good intelligence value.

Any enforcement action targeted towards an identified group needs to anticipate the displacement of trade to other, similar, currently existing groups, or the creation of a new group to replace the original. However, while displacement may occur in some cases, the level of trade is likely to have reduced. For example, groups that have membership bases of over 21 000 individuals takes time to get to such levels and it seems safe to assume that their replication will not happen instantly. Therefore, shutting down groups can form a viable tactical option to disrupt trade in the short term.

Sellers

Sellers appear to operate with impunity, and any reference to legislation, legality or permits is rare. Very little effort is given to disguising illegal activity; the use of codes or any forms of text deception is non-existent. The term “serious buyer” appeared 17 times, involving a total of 24 animals across 15 species, signifying that traders were looking only for buyers that were more interested in making a purchase. Trading appears to be very relaxed and traders will happily provide their contact details and will sometimes offer to deliver the animal to the buyer’s home address. Most traders monitored expressed a preference for WhatsApp, rather than Facebook messaging, to discuss prices and transactions.

This assessment not only illustrates the high volume of trade occurring on Facebook, but also reveals the great number of sellers involved. Each trader appears to be operating on a relatively small scale, yet the volume of trade itself is great, cumulatively being driven by many individuals. It is clear that the trade primarily targets the domestic market, given that the language used was predominantly Bahasa Malaysia, prices were quoted in Malaysian Ringgit and local transportation / delivery options were available. Additionally, wording in the adverts included “free delivery” and “delivered by bus” in regard to the transport of the animals once purchased. Some even mentioned delivering live specimens by post. On only one occasion, involving Radiated Tortoises, did a trader offer to ship the animals overseas (Figure 15) and therefore contravenes CITES.

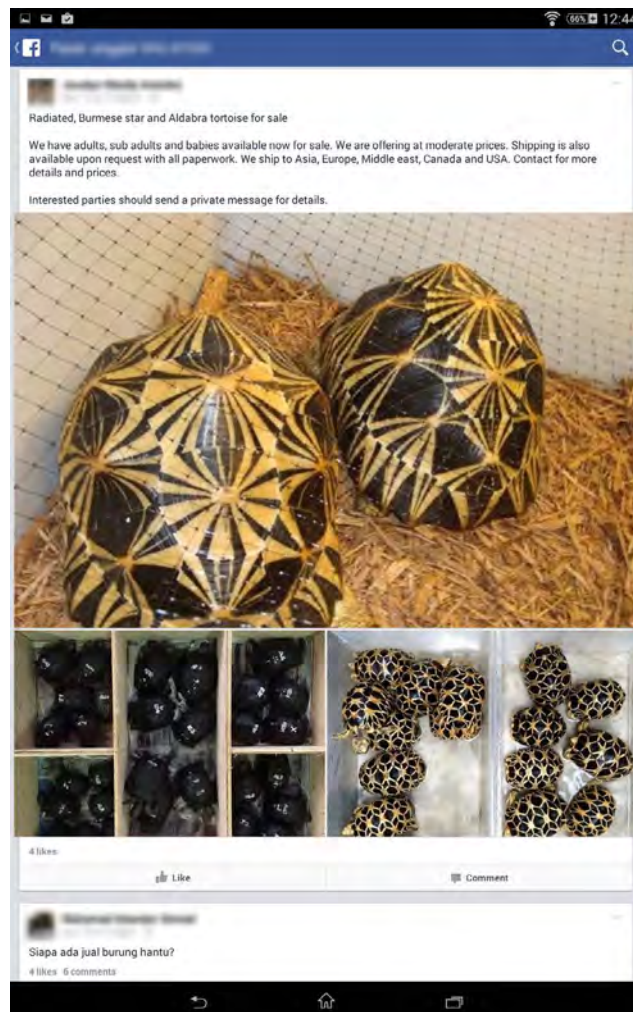
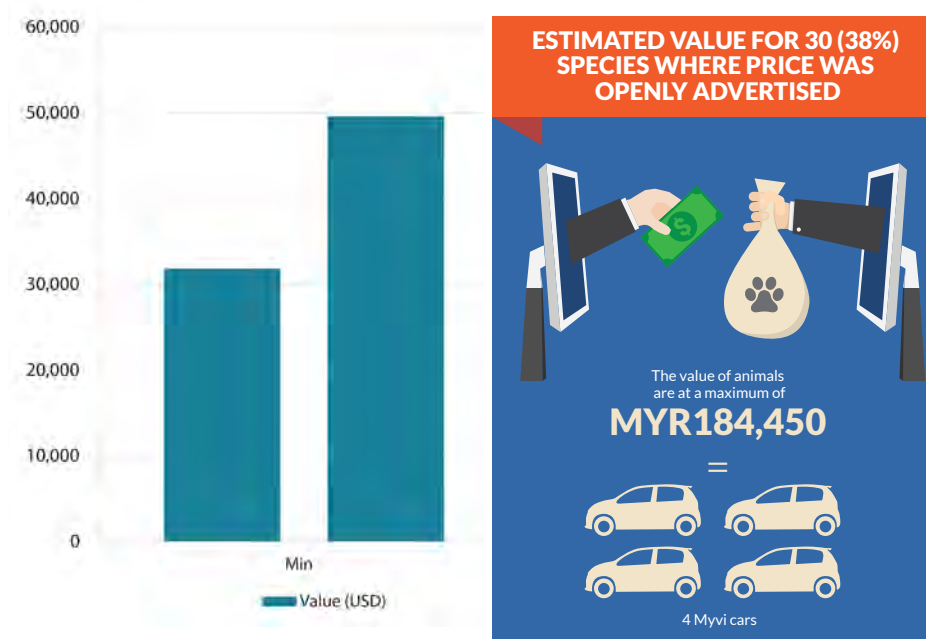


Figure 15: Example of a Post where a Trader was Offering to Ship the Animals Overseas

Price information was given in 79 of the 236 posts, for a total of 30 species (38%), including all six of the most commonly traded species. Prices for individual animals ranged from a low of MYR40 (USD9.30) for an Asian Vine Snake *Ahaetulla prasina* to a high of MYR 13 119 (USD3 000) for a Palm Cockatoo *Probosciger aterrimus*. If the total minimum (n=209) and total maximum (n=265) number of animals recorded for each of these 30 species fetches the prices as advertised in these posts, the value of the illegal trade in these animals was worth a minimum MYR118 525 (USD27 700) and a maximum MYR184 450 (USD43 100) (Figure 16).

Figure 16: Estimated value for 30 (38%) individuals where price was openly advertised



Enforcement Action

Two comprehensive reports were disseminated to PERHILITAN during the assessment period. These reports concerned six posts for Totally Protected and / or CITES Appendix I listed species and were provided with dossiers on traders and their trading activities on other social networking sites (such as Instagram). These were reported based on timeliness of the information received (for swift enforcement action) and the illegality of the trade.

Over the past year, Malaysian authorities, particularly PERHILITAN, have conducted a series of investigations into the online trade which has resulted in enforcement successes. In January 2015, PERHILITAN ran “Operation Taring”, in which seven suspects aged between 19 and 30 were arrested. Officials confiscated 64 Totally Protected animals, including Sun Bear cubs, Leopard Cat cubs, slow loris, eagles and parrots (Kanyakumari, 2015). In July 2015, PERHILITAN arrested four individuals for trying to sell orangutans after they had advertised these animals via Facebook. The subsequent investigations resulted in the arrest of two Malaysians and two Indonesians who were believed to be part of a trafficking syndicate. All four have since been charged with illegal possession and causing suffering to the animals under the WCA.

By its very nature online trade is, in most situations, accessible to anyone using the internet. The web's visibility presents greater opportunities in terms of monitoring illegal activity as well as the reporting of such activities, compared to any such activity taking place in a physical market. Towards this end, TRAFFIC has been receiving an increasing number of reports on the illegal wildlife trade occurring on Facebook, not just in Peninsular Malaysia, but also from Sabah and Sarawak on Borneo. During 2014, only eight reports were either responded to or detected by TRAFFIC concerning wildlife trade on Facebook in Malaysia. However, in 2015 this figure rose to 37 reports (excluding those documented as part of this assessment), and involved a minimum of 59 individual animals from 42 species. This includes seven gibbons, two Sun Bears, Sunda Pangolins *Manis javanica* and the Bornean endemic Earless Monitor Lizard *Lanthanotus borneensis*. In July 2015, an advertisement was posted on Facebook offering "a bunch of Borneo Earless Monitors for sale, export available" (suspected to be at least 30 individuals). This is the first documented incident of the species being offered for sale in Malaysia (Stoner and Nijman, 2015). In addition, 33 reports were received for Indonesia in 2015, reinforcing that illegal trade on social media is not unique to Malaysia.

CONCLUSION

Close to half of the trade recorded during this assessment was deemed to be illegal, involving 49 species for which trade is prohibited under Peninsular Malaysian law. This rapid assessment illustrates that wildlife trade conducted on Facebook is a cause for concern and is more widespread than previously thought. Significantly, it has revealed a domestic demand in Malaysia for high profile wild mammals as pets.

A minimum of 311 and a maximum of 380 individual animals and birds from a total of 80 species were recorded for sale. Considering the relatively short time period spent monitoring these websites (around 50 hours over five months, or 30 minutes a day), the volume of trade recorded from just 14 Facebook groups seems high. Equally significant is the fact that 106 unique sellers have been identified from the 236 advertisements, emphasizing the involvement of many individuals in illegal activity. At least 60 unique sellers posted advertisements on just one Facebook page, accounting for a maximum of 88 (28%) animals being offered for sale. All the sellers have conducted trade in a blatant manner, expressing no fear of apprehension. Furthermore, a number of sellers were found to have been offering wildlife for sale on other platforms in addition to Facebook, for instance Instagram.

Notably, this research also demonstrates a domestic demand for native mammals in the live pet trade, the prevalence of which was not previously documented within Malaysia. Popular species include Sun Bears, gibbons, Sunda Slow Lorises and otters, which recorded regular turnover. This is unsurprising given that all animals found for sale were live; the majority of them juvenile animals. The breadth of species observed was also of concern, particularly as a high proportion of trade contravenes legislation, with 93% of the encountered species protected by Malaysian law and listed in one of the three CITES appendices, which requires relevant CITES permits where non-native species are in trade.

With illegal wildlife trade gaining more publicity on the world stage, governments have dedicated greater effort and resources to combating and curtailing the problem. Vigilance and scrutiny by society and the private sector have increased in tandem. Traders, especially those intending to conduct their business illegally, are therefore predisposed to seek other, non-conventional methods of sale, such as social media, which provides efficient and private communication channels. The ease and convenience the internet offers benefits traders and buyers alike, particularly because of its minimal outlay for business. They also potentially avoid taxes and the need to undergo any form of scrutiny by complying with regulations, such as applications for permits and licences.

The challenges faced here are multi-faceted. Many enforcement authorities do not have adequate systems, expertise or capacity to tackle this problem, including detecting criminal activity that occur in closed, protected areas involving the spectrum of platforms allowing online trade. Often, authorities are able to take action to combat wildlife trade that contravenes legislation within their jurisdiction, but they need to be able to detect it in the first instance and specialist resources are required to investigate and take action that may lead to prosecution or other deterrents, especially where they involve a network or organized criminality. This report highlights the ease and convenience of conducting business through social media, whether it involves legal or illegal activity.

The sheer volume of wildlife trade observed serves to exemplify the need for additional resources to ensure the regular monitoring of online activity. Although this has already been initiated by PERHILITAN through its Cybercrime Unit and collaboration with the MCMC, the viral nature of the internet and its ability to expand rapidly means that law enforcement agencies will constantly be at a disadvantage. Therefore shared responsibility to ably tackle this problem is required.

In line with this, TRAFFIC has initiated discussions with Facebook Asia-Pacific based on the findings of this assessment. Facebook has expressed commitment to working with TRAFFIC to help tackle the illegal online trade of wildlife in Malaysia. Its user Terms of Service do not permit the sale and trade of endangered animals, and states that Facebook would not hesitate to remove any reported and verified content that violates these terms.

RECOMMENDATIONS

Short Term: Improving Detection and Law Enforcement

Consideration should be given to closer collaboration between law enforcement agencies and Facebook to ensure that prolific and repeat offenders are targeted in a co-ordinated and effective manner. Under their Law Enforcement Guidelines, Facebook's current practice is to liaise with — and respond to — law enforcement requests concerning illegal activity. To complement this, TRAFFIC will seek to facilitate collaboration between Facebook and the relevant law enforcement agencies and regulatory bodies in Malaysia, including wildlife departments, multimedia agencies, and the police. This is needed to meaningfully tackle this crime type through a more formal engagement to fully utilise the current procedures outlined by Facebook's Law Enforcement Guidelines. Moving forward, TRAFFIC will also endeavour to work closely with Facebook and relevant agencies in other countries facing similar issues regarding the illegal online trade in wildlife.

Medium Term: Civil Society Engagement

Private sector companies that operate social media sites play a pivotal role in raising awareness regarding this issue. Equally, members of the public accessing these sites are encouraged to report illegal activity to the authorities, or other platforms available for such purposes. The current situation means consistent and wide-scale monitoring of illegal activity on social media sites is largely absent and remains a challenge for law enforcement. However, the public denouncement of illegal wildlife trade on social media sites could serve to deter potential sellers. Various options to report violations involving wildlife crime exist, which include:

1. A direct report to law enforcement agencies at a national level;
2. A direct report to Facebook itself: Facebook's Community Standards is a strong affirmation of its policy against any illegal activity, including wildlife crime, and provides a procedure for any direct reports to Facebook (https://www.facebook.com/help/181495968648557?ref=community_standards);
3. A report through TRAFFIC, including via the Wildlife Witness App that can be downloaded for iPhone (<https://itunes.apple.com/us/app/wildlife-witness/id738897823?mt=8>) or Android (<https://play.google.com/store/apps/details?id=com.taronga.wildwitness>) Reports can involve posts, messages, groups and other elements that can be considered a violation of legislation.

Long Term: Co-ordinated Dedicated Forum

While in many cases authorities are able to take action against illegal wildlife activity within their jurisdiction, more can still be done to effectively and efficiently address this identified problem. Given the scale of this problem at an international level, TRAFFIC encourages a dedicated forum at a global and regional level with social networking bodies, governments, intergovernmental bodies and NGO partners. This forum would serve as a platform for these stakeholders to consider specific issues and solutions concerning regulation of the illegal trade currently being conducted through

social media, including how efforts by different parties can be strengthened and synchronised. Viable options for self-policing by social media networks combined with mechanisms for reporting illegal trade to enhance enforcement efforts should be considered, including the establishment of systems to prohibit or suspend social media accounts of repeat offenders. Partnerships between governments, social media companies, international enforcement agencies like Interpol, conservation groups and regulatory institutions such as CITES need to formulate new, realistic solutions to address this uniquely challenging and rapidly evolving method of wildlife trafficking.

REFERENCES

- Anon. (2008). *900 Oven-ready Owls and 7,000 Live Lizards Seized in Malaysia*. Wildlife Extra. <http://www.wildlifeextra.com/go/news/malaysia-crime827.html#cr>.
- Anon. (2015). *Indonesia a Top Player in SEA's Illegal Wildlife Trade: Bareskrim*. Jakarta Globe (Indonesia): December 3: <http://jakartaglobe.beritasatu.com/news/indonesia-top-player-seas-illegal-wildlife-trade-bareskrim/>.
- BirdLife International (2015) Species factsheet: *Gracula religiosa*. Downloaded from <http://www.birdlife.org> on 11/12/2015.
- BirdLife International (2015) Species factsheet: *Cacatua sulphurea*. Downloaded from <http://www.birdlife.org> on 17/12/2015.
- Baskaran Subramaniam (2014). *On the social media circuit*. The Star Online (Malaysia). 6 January. <http://www.thestar.com.my/News/Education/2014/01/05/On-the-social-media-circuit/>
- Bouhuys, J. and Van Scherpenzeel, M. (2015). *Online trade in freshwater turtles and tortoises in Indonesia and Malaysia: Legality index of online trade and legislation awareness index among traders*. Undergraduate thesis. Van Hall Larenstein, University of Applied Sciences, Netherlands.
- Carrasco, R. D. S., Oliveira, A.D.P., Filho, J. L. and Moreira, A. (2014). *Ontology supported system for searching evidence of wild animals trafficking in social network posts*. Revista Brasileira de Computação Aplicada: Passo Fundo, Volume 6 Number 1: 16-31.
- Cheng, Nicholas. (2015). More than 30 Malaysians fall prey to cybercrime daily. The Star (Malaysia). October 26. <http://www.thestar.com.my/news/nation/2015/10/26/cybercrime-30-msians-daily/>
- Chng, S. C. L., Eaton, J.A., Krishnasamy, K., Shepherd, C.R. and Nijman, V. (2015). *In the Market for Extinction: An inventory of Jakarta's bird markets*. TRAFFIC. Petaling Jaya, Selangor, Malaysia
- Chng, S. C. L. and Bouhuys, J. (2015). Indian Star Tortoises: Shop sales fall as internet trade increases. TRAFFIC Bulletin Vol. 27 No. 2: pp 73-78.
- CITES. (2006). *Review of Significant Trade in specimens of Appendix-II species* (AC22 Doc. 10.2. Annex 3). Twenty-second meeting of the Animals Committee Lima (Peru), 7-13 July 2006
- CITES. (2009). *Legal and Illegal Internet Trade in Internet Trade in Specimens of CITES-Listed Species*. CITES E-commerce workshop Vancouver 24-26 February 2009 (Canada). CITES, Gland Switzerland.
- del Hoyo, J.; Collar, N. J.; Christie, D. A.; Elliott, A.; Fishpool, L. D. C. 2014. *HBW and BirdLife International Illustrated Checklist of the Birds of the World*. Barcelona, Spain and Cambridge UK: Lynx Edicions and BirdLife International.
- Department of Wildlife and National Parks. (2012). *DWNP Annual Report 2012*. Kuala Lumpur, Malaysia.
- Heng, N. (2011). Owls Poached for Exotic Meat Market. The Star (Malaysia): September 11. <http://www.thestar.com.my/story/?file=%2F2011%2F9%2F13%2Flifefocus%2F9328322>
- IFAW. (2008). *Killing with Keystrokes*. London, United Kingdom.
- IFAW. (2014). *Wanted - Dead or Alive: Exposing Online Wildlife Trade*. London, United Kingdom.
- IUCN. (2012). IUCN Red List of Threatened Species. Version 2012.2. [online] Available at: <http://www.iucnredlist.org>.
- Lee, P. (2015). Endangered Tortoises seized en route to Malaysia. The Star (Malaysia). 2 October: <http://www.thestar.com.my/news/nation/2015/10/02/endangered-tortoises-seized/>
- Kanyakumari, D. (2015). Tech-savvy Youth the Biggest Players in Illegal Wildlife Trade. The Star (Malaysia): <http://www.thestar.com.my/news/nation/2015/03/14/young-and-wild-via-phones-techsavvy-youth-the-biggest-players-in-illegal-wildlife-trade/>

- Malaysian Communications and Multimedia Commission (MCMC). (2015). *Industry Performance Report*. Cyberjaya, Malaysia.
- Mutiah, W. (2014). *Sun Bear, Barn Owls and Civet Among Wildlife Seized from Two Brothers*. The Star (Malaysia). October 14: <http://www.thestar.com.my/news/nation/2014/10/14/protected-animals-rescued/>
- Muzliza, M. (2014). *Malaysians spend five hours online daily and it is mostly social media, says report*. The Malaysian Insider (Malaysia). 11 September: <http://www.themalaysianinsider.com/malaysia/article/malaysians-spend-five-hours-online-daily-and-it-is-mostly-on-social-media-s>
- Nekaris, K.A.I. and Nijman, V. (2007). CITES Proposal Highlights Rarity of Asian Nocturnal Primates (Lorisidae: *Nycticebus*). *Folia Primatol* 2007; 78:211–214. DOI: 10.1159/000102316
- Nijman, V. and Stoner, S. S. (2014). *Keeping an Ear to the Ground: Monitoring the Trade in Earless Monitor Lizards*. TRAFFIC Petaling Jaya, Selangor, Malaysia
- Norni, M. (2013). *13.3 million M'sians are Facebook users*. The Borneo Post online (Malaysia). June 16. <http://www.theborneopost.com/2013/06/16/13-3-million-msians-are-facebook-users/>
- Nowell, K. and Jackson, P. (1996). *Wild Cats. Status Survey and Conservation Action Plan*. IUCN/SSC Cat Specialist Group. IUCN, Gland, 382 p.
- Phelps, J. Biggs, D and Webb, T. Typologies of the escalating illegal wildlife trade (*In Prep*)
- Puan, C. L., Goldizen, A. W., Zakaria, M., Hafidzi, A. N. and Baxter G. S. (2011). *Absence of differential predation on rat by Malaysian Barn Owls in Oil Palm Plantations*. *Journal of Raptor Research*: 71-78. United States.
- Regan, K. (2015). *10 Amazing Social Media Growth Stats from 2015*. SocialMediaToday. 10 August: <http://www.socialmediatoday.com/social-networks/kadie-regan/2015-08-10/10-amazing-social-media-growth-stats-2015>
- ProFauna (2009). *Wildlife Trade Survey on the Bird Markets in Java*. ProFauna Indonesia, Malang, Indonesia. <http://worldanimal.net/documents/final-report-bird-market-survey-2009.pdf>
- Shepherd, C. R. and Nijman, V. (2007). An assessment of wildlife trade at the Mong La Market on the Myanmar-China Border. *TRAFFIC Bulletin* Vol. 21 No. 2: 85-88.
- Shepherd, C. R and Nijman, V. (2008). *Pet Freshwater Turtle and Tortoise Trade in Chatuchak Market, Bangkok, Thailand*. TRAFFIC Southeast Asia.
- Shepherd, C. R. Sukumaran, J. and Wich, S. A. (2004). *Open Season: An analysis of the pet trade in Medan, Sumatra 1997 – 2001*. TRAFFIC Southeast Asia.
- Shepherd, C. R. (2006). *The Bird Trade in Medan, North Sumatra: An Overview*. *BirdingASIA* 5 (2006): 16–24.
- Shepherd, C. R. (2012). *The Owl Trade in Jakarta, Indonesia: A Spot Check on the Largest Bird Markets*. *BirdingASIA* 18 (2012): 58–59.
- Stoner, S. and Nijman, V. (2015). *The case for CITES Appendix I-listing of Earless Monitor Lizards*. *TRAFFIC Bulletin* Vol. 27 No. 2: pp 55-58.
- Sukumaran, T. (2015). *Buying protected animals just a screen tap away*. The Star Online (Malaysia). 28 July: <http://www.thestar.com.my/News/Nation/2015/07/28/Buying-protected-animals-just-a-screen-tap-away/>
- TRAFFIC. (2012). *TRAFFIC Bulletin Seizures and Prosecutions*: Vol. 16 No. 3 (March 1997) to Vol. 24 No. 1 April.
- TRAFFIC. (2015). *Hundreds of Protected Tortoises Seized in Madagascar*. TRAFFIC. <http://www.traffic.org/home/2015/10/5/hundreds-of-protected-tortoises-seized-in-madagascar.html>
- UK Parliamentary. (2013). *Home Office Select Committee Report*. United Kingdom Parliamentary. <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmhaff/70/7003.htm>
- United Nations Development Programme - Global Environment Facility. (2014). *Project Document: Improving Connectivity in the Central Forest Spine (CFS) Landscape - IC-CFS*. Malaysia.

Walker, R.C.J. (2011). *The Internet based trade in Madagascar's Critically Endangered Tortoise Species: A preliminary Study Identifying the Conservation Threats*. Testudo Vol. 7, No. 4. British Chelonia Group, United Kingdom.

Wildlife Conservation Society. (2015). *Living Sumatran orangutan confiscated as evidence*. WCS News Releases. April 16: <http://newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/6687/April-16--Indonesian-Authorities-Arrest-Online-Orangutan-Trader.aspx>

Williams, P. (2001). *Organised Crime and Cybercrime: Synergies, Trends and Responses*. Global Issues Volume: 6 Issue: 2 Dated: August 2001 Pages: 22 to 26

ANNEX 1

Full itinerary of species found advertised for sale in Peninsular Malaysia from November 2014 – March 2015

Species	Number of advertisements featured	Min number of individuals	Max number of individuals	CITES Appendix	WCA Protection status
<i>Prionailurus bengalensis</i>	24	27	42	I/II	TP
<i>Elanus caeruleus</i>	18	33	55	II	TP
<i>Tyto alba</i>	12	21	29	II	TP
<i>Spilornis cheela</i>	9	6	9	II	TP
<i>Gracula religiosa</i>	9	39	39	II	P
<i>Ketupa ketupu</i>	8	5	8	II	TP
<i>Nycticebus coucang</i>	8	9	9	I	TP
<i>Trachypithecus obscurus</i>	6	6	6	II	P
<i>Prionodon linsang</i>	6	5	6	II	TP
<i>Python reticulatus</i>	6	6	6	II	P
<i>Milvus migrans</i>	5	3	5	II	TP
<i>Spizaetus cirrhatus</i>	5	7	7	II	TP
<i>Haliastur indus</i>	5	6	6	II	TP
<i>Strix leptogrammica</i>	5	6	9	II	TP
<i>Cacatua galerita galerita</i>	6	17	19	II	P
<i>Psittacula longicauda</i>	5	4	6	II	TP
<i>Macaca nemestrina</i>	4	6	6	II	P
<i>Python brongersmai</i>	4	8	8	II	TP
<i>Paradoxurus hermaphroditus</i>	4	8	8	III	P
<i>Lutrogale perspicillata</i>	4	3	4	II	TP
<i>Spizaetus nipalensis</i>	3	1	3	II	TP
<i>Python regius</i>	3	2	3	II	P
<i>Tragulidae spp.</i>	3	3	3	NC	P
<i>Crocodylus porosus</i>	3	3	3	I/II	TP
<i>Spizaetus alboniger</i>	3	3	3	II	TP
<i>Macaca fascicularis</i>	3	3	3	II	P
<i>Morelia viridis</i>	3	1	3	II	P
<i>Bubo sumatranus</i>	3	3	3	II	TP
<i>Ratufa bicolor</i>	2	3	3	II	TP
<i>Strix seloputo</i>	2	2	2	II	TP
<i>Astrochelys radiata</i>	2	3	3	I	TP
<i>Iguana iguana</i>	2	2	2	II	TP
<i>Aratinga solstitialis</i>	2	2	3	II	P
<i>Prionailurus planiceps</i>	2	1	2	I	TP
<i>Helarctos malayanus</i>	2	2	2	I	TP
<i>Probosciger aterrimus</i>	2	2	2	I	TP
<i>Carettochelys insculpta</i>	2	2	2	II	TP
<i>Psittacus erithacus</i>	2	2	2	I	P
<i>Hylobates lar</i>	2	2	2	II	TP

<i>Python bivittatus</i>	2	2	2	II	P
<i>Chelydra serpentina</i>	2	2	2	NC	Not listed
<i>Herpestes javanicus</i>	1	1	1	III	TP
<i>Cacatua ducorpsii</i>	1	1	1	II	P
<i>Loriculus galgulus</i>	1	1	1	II	P
<i>Gekko gecko</i>	1	1	1	NC	P
<i>Arctictis binturong</i>	1	1	1	III	TP
<i>Erythrura gouldiae</i>	1	1	1	NC	Not listed
<i>Macrochelys temminckii</i>	1	1	1	III	P
<i>Cacatua alba</i>	1	1	1	II	P
<i>Martes flavigula</i>	1	1	1	III	TP
<i>Pycnonotus zeylanicus</i>	1	1	1	II	TP
<i>Geochelone elegans</i>	1	1	1	II	P
<i>Heosemys spinosa</i>	1	1	1	II	P
<i>Morelia spilota</i>	1	1	1	II	P
<i>Ahaetulla prasina</i>	1	1	1	NC	P
<i>Geochelone platynota</i>	1	1	1	I	P
<i>Leiopython albertisii</i>	1	1	1	II	P
<i>Lutrinæ spp</i>	1	1	1	NC	TP
<i>Haliaeetus leucogaster</i>	1	1	1	II	TP
<i>Trichoglossus haematodus</i>	1	1	1	II	P
<i>Ara ararauna</i>	1	1	1	II	P
<i>Copsychus malabaricus</i>	1	1	1	NC	P
<i>Ninox scutulata</i>	1	1	1	II	TP
<i>Heosemys grandis</i>	1	1	1	II	P
<i>Astrochelys yniphora</i>	1	1	1	I	TP
<i>Python curtus</i>	1	1	1	II	P
<i>Nymphicus hollandicus</i>	1	1	1	NC	Not listed
<i>Accipiter trivirgatus</i>	1	1	1	II	TP
<i>Ophiophagus hannah</i>	1	1	1	II	P
<i>Cacatua sulphurea</i>	2	2	2	I	TP
<i>Boiga dendrophila</i>	1	1	1	NC	P
<i>Phodilus badius</i>	1	1	1	II	TP
<i>Garrulax leucolophus</i>	1	1	1	NC	Not listed
<i>Platysternon megacephalum</i>	1	1	1	I	P
<i>Chelus fimbriatus</i>	1	1	1	NC	Not listed
<i>Presbytis femoralis</i>	1	1	1	II	P
<i>Accipiter nisus</i>	1	1	1	II	TP
<i>Aldabrachelys gigantea</i>	1	1	1	II	Not listed
<i>Myiopsitta monachus</i>	1	1	1	II	P
<i>Naja kaouthia</i>	1	1	1	II	P
TOTAL	243	311	380		

TP: Totally Protected; P: Protected.

TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

For further information contact:

TRAFFIC

Southeast Asia Regional Office

Unit 3-2, 1st Floor

Jalan SS23/11, Taman SEA

47400 Petaling Jaya

Selangor, Malaysia

Telephone: (603) 7880 3940

Fax : (603) 7882 0171

Website: www.traffic.org

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