

NEWS AND NOTES

Journal of Indonesian Natural History going online

Carl Traeholt and Wilson Novarino (Eds.)

It is with great pleasure that we can announce that the Journal of Indonesian Natural History (JINH) will now go online. After five years of building the JINH, where the journal relied on a temporary home-page without online submission systems, it is now time to take it online. This follows our original intention i.e. to make it fully anchored and home at Andalas University. The entire process of migrating the JINH, setting up the new online submission systems, testing it and being ready to receive submissions does not happen by itself overnight. It has resulted in a few delays of getting Vol 6(2) uploaded. Therefore, Vol 7(1) and Vol 7(2) will appear as one Volume. We hope it has been worth the wait and are now proud to announce that JINH's new online submission system is ready. Manual submissions to the editors is still possible too.

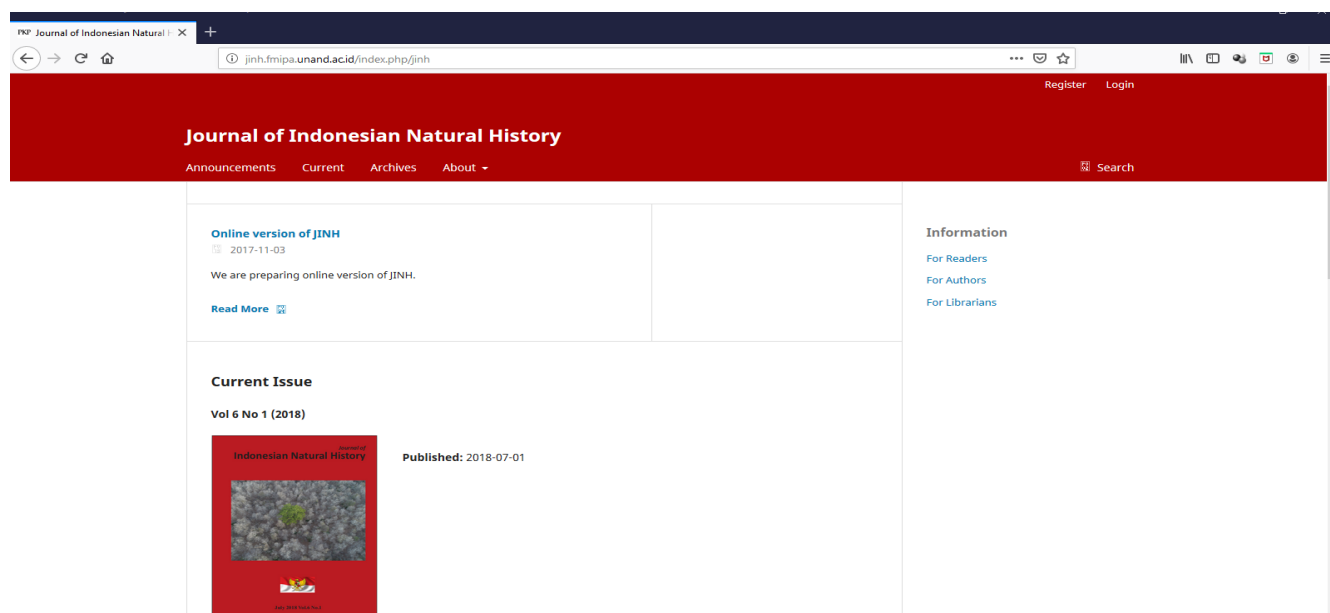
In the process of bring JINH online, Dr. Aadrean has taken up the task as "Editorial Manager" and will be responsible for JINH's online platform. He will continue to play an important role in keeping track of JINH that will also appear on Google Scholar.

JINH has also obtained its online ISSN number and, together with the printed ISSN, JINH's contributions will be searchable through the international search engine, giving JINH a much wider and Global outreach.

JINH's website and online submission portal is:
<http://jinh.fmipa.unand.ac.id>

Submissions can still be directed to the editor(s) at:
jinh@sci.unand.ac.id

For comments to JINH's website, reporting portal issues and other issues, emails must be addressed to the Editorial Manager at:
editorjinh@gmail.com



Sumatran tiger under threat

The Critically Endangered Sumatran tiger continues to suffer population decline. According to local authorities, a pregnant tigress with two cubs was found dead in the Indonesian province of Riau after being caught in a pig trap. The tigress, aged about 4 years, was reportedly trapped earlier this week around the 26th September, managed to escape but was found dead in a ravine about 150 metres (500 feet) from the trap with part of the snare wrapped around its body. A necropsy revealed that the tigress suffered a ruptured kidney.

The pig-snare was set by a local villager, a common way for communities to obtain additional food supply. The villager who admitted to setting traps was detained for interrogation.

Sumatran tigers, the most critically endangered tiger subspecies, are under increasing pressure as their jungle habitat continue to decline and poaching combined with bi-catches in snares set for other wildlife species take a huge toll on the population.

Indonesia take action against illegal wildlife trade

Indonesia became a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1978, which entered into force on the 28th March, 1979. Despite its 40th anniversary, illegal wildlife trade seems to thrive better than ever in Indonesia. The anniversary was commemorated as National Fauna and Flora Day (known locally as Hari Cinta Puspa Satwa Nasional/HCPNS) and was celebrated together with various local and international environment and conservation partners to raise awareness of the world's wild fauna and flora.

According to the International Enforcement Agency (IEA), the value of global trade in wildlife is equivalent to the value of human trafficking, narcotics and illegal weapons. The trade in protected animals has a complicated or covert transaction path and is more open through e-commerce, marketplace and social media channels. The WWF Living Planet Report 2018, launched globally

in October, revealed that at least 60 percent of vertebrate animals have disappeared in less than 50 years. The main threats to the species identified in the report are directly related to human activities, one of which is wildlife trade due to high market demands for several species.

Indonesia is a source and also a market for illegal wildlife chain of custody in Asia. Loss of these animals have an impact on the sustainability of various key species in nature and collaboration between all parties is needed to take decisive steps to stop illegal wildlife trade. In this context, the public can play an important role in combating illegal wildlife trade by actively reporting crime and illegal wildlife trade to the authorities. This has been made much easier with the formation of the online E-Reporting of Protected Animals portal that is managed by the National Police Criminal Investigation Agency BARESKRIM POLRI. Reporting can now be done through applications for mobile phones, tablets and computers.

The “Indonesia Says No to Illegal Wildlife Trade” campaign was launched in Jakarta by a team of multi-stakeholders working in biodiversity conservation and sustainability in Indonesia, such as the Ministry of Marine Affairs and Fisheries, Indonesia's Police Force, Indonesia's National Army, Attorney General's Office, Corruption Eradication Commission, Financial Transaction Reporting and Analysis Center, House of Representatives, non-governmental organizations, religious leaders, art workers, and athletes. The ultimate goal of the campaign is reducing the wildlife trade by increasing public awareness and participation in reporting suspected illegal wildlife trade to BARESKRIM POLRI.) online through the E-Reporting of Protected Animal applications on mobile phones or computers tablet.

Asia remains the global centre for illegal wildlife trade for a variety of globally protected wildlife as a source, transit point and market destination for selling endangered and high-value wildlife.

Accelerating ice-melt on Greenland

A new study shows reiterate the effect of global warming on the Greenland ice-shelf. It concludes that from early 2003 to mid-2013, the total mass of ice in Greenland declined at a progressively increasing rate. The researchers used Gravity Recovery and Climate Experiment and global positioning system observations to record spatial patterns of the sustained acceleration and the abrupt deceleration in mass loss are similar. The strongest accelerations tracked the phase of the North Atlantic Oscillation. It revealed that the negative phase of the NAO enhances summertime warming and insulation while reducing snowfall, especially in west Greenland, driving surface mass balance more negative. The spatial pattern of accelerating mass changes reflects the geography of NAO-driven shifts in atmospheric forcing and the ice sheet's sensitivity to that forcing. While the mid-2013 saw an abrupt reversal and very little net ice loss in the next 12–18 months the authors conclude that southwest Greenland will become a major future contributor to sea level rise.

Bevis, M. et al (2019). Accelerating changes in ice mass within Greenland, and the ice sheet's sensitivity to atmospheric forcing. *PNAS* **116**(6): 1934-1939.

Indonesian trade drives extinction of a songbird

The illegal wildlife trade in Indonesia has resulted in many recent extinctions of a variety of species. None seem as apparent as the illegal cage bird trade, which is increasingly recognised as a major impediment to the survival of a large number of songbirds. The authors focused on the black-winged mynas (*Acridotheres melanopterus*, *A. tricolor* and *A. tertius*), three species of Critically Endangered songbirds endemic to Indonesia. Only 20 years ago these species were not considered globally threatened but high levels of trapping from the wild for the largely domestic cage bird trade has brought all three species to the brink of extinction. It is estimated that less than 500 black-winged mynas remain in the wild. The study investigates the trade

in black-winged mynas, online and in bird markets, and make an assessment of the role captive breeding played in the conservation and management of the species over the period 2009–2018. It showed that prices peaked in 2014 at US\$140 per bird but has decreased to US\$85 in 2018, which indicate higher supply and lower demand. Seven bird markets were in western Java and in 127/145 visits the authors recorded 1253 black-winged mynas for sale. Turnover was high, with 50% of birds sold after one week upon arrival in the market. This amounts to an estimated 1300–2300 mynas sold annually in these seven bird markets with a retail value of US\$170,000. Few birds had closed leg-rings, but were in all likelihood a combination of captive-bred, first-generation captive-born and wild-caught individuals; some appeared to be crossbreeds between the three recognised species. Including birds being traded on all markets in Java and Bali as well as a thriving online trade, the authors estimated that the number of black-winged mynas in private ownership in Indonesia is in the order of 40,000 birds. They are concerned that without proper registration and regulation in the trade of captive-bred mynas, even a small amount of wild-caught birds entering this now substantial trade will act as a serious impediment to the conservation of black-winged mynas. With the species already being ecologically extinct, we anticipate that it soon will join the ranks of species like Père David's deer *Elaphurus davidianus* and scimitar-horned oryx *Oryx dammah* that are extinct in the wild but that have captive populations in the tens of thousands. To prevent the imminent extinction of black-winged mynas in the wild, the authors recommend (1) that the Indonesian authorities invest in more effective law enforcement and prosecution of lawbreakers; (2) establishing a multi-stakeholder three species black-winged myna management plan, in which commercial captive breeders participate; and (3) better coordination of reintroduction programmes.

Nijman et al., (2018). Wildlife trade, captive reeding and the imminent extinction of a songbird *Global Ecology and Conservation*. **15**: e00425

Bear trade in Lao

This study examines seizure data that implicates Lao People's Democratic Republic as a place of origin, transit point or destination of illegally-sourced live bears, their parts and derivatives, from 2010 to 2016. Intensive surveys of trade in 25 towns and villages carried out in 2016 recorded bear parts and derivatives for sale in more than half of locations surveyed, largely for use in traditional medicine. Live bears that were seized or surrendered to authorities were also analysed in the study, and of all cases combined, live bears accounted for more than half (62.7%). Live bears were mainly cubs, and intended for sale to primarily stock bear bile extraction facilities (bear farms). Four other countries were implicated in cases involving trade in bears, their parts or derivatives, with Lao PDR, including China, Myanmar, the United States of America (US) and Viet Nam. The authors conclude that Lao PDR remains a source of bears taken illegally from the wild, in Lao PDR and in neighbouring countries, and a hub of illegal wildlife trade. They also conclude that the study provides evidence of Lao PDR's ongoing and open trade in bears, their parts and derivatives, in direct violation of national legislation, and of the continuing violations against the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Gomez, L. and Shepherd, C. (2018). Trade in bears in Lao PDR with observations from market surveys and seizure data. *Global Ecology and Conservation* **15**: e00415.

Private landowners and species conservation

Species protection legislation has been used as one of the main approaches in conservation – yet in many cases there is only little information about the effectiveness and side-effects of such regulation. Noncompliance can limit effectiveness of legislative protection, and deliberate harmful actions by landowners have sometimes been reported as a response to restrictions. This type of response from

private landowners is common across the world. In this study, the authors focused on the attitudes of 186 Finnish forest owners toward the protection of Siberian flying squirrel *Pteromys volans* – a species which is protected according to the European Union Habitats Directive and is a well-known example for species protection in Finland. The study explored the attitudes and claims of harming protected species by comparing the responses of persons with and without direct experience of legal protection by structural equation modelling. The results suggested that experience did not explain forest owners' attitudes toward having the species in their forest. Claims of harming protected species were connected to policy attitudes and should be interpreted as a political phenomenon: they reflect political discourse on conservation policy and are a part of debate between stakeholders. Accidental and reckless noncompliance seem more important phenomena than intentional harming, especially as the chance in Finnish Nature conservation likely Act likely affects information of nest sites on logging areas. Other instruments than legislative protection of known nest sites might be more effective in protecting the flying squirrel population.

Jokinen, M. et al. (2018). Private landowners and protected species: What sort of noncompliance should we be worried about? *Global Ecology and Conservation* **15**: e00407

Trade in non-CITES listed species

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aims to ensure that international trade does not further endanger species already threatened by trade. While the scale of trade in CITES-listed species is relatively well documented, trade in non-CITES-listed species is usually only collected when it concerns physical or online market surveys. In this study, the authors explore the challenges faced in monitoring trade in non-CITES-listed species based on available data. They found that data available on non-CITES-listed species are

confusing, irregular, and far from complete and can only provide an indication of the actual quantities traded. In addition, it is subjected to the willingness of individual countries to provide or record data. Limited availability of data on trade in non-CITES-listed species can impede conservation efforts, as the actual level of trade remains unknown and concerns are often undetected.

Janssen, J. and Shepherd, C.R. (2018). Challenges in documenting trade in non CITES-listed species: A case study on crocodile skinks (*Tribolonotus spp.*). *Journal of Asia-Pacific Biodiversity* **11**(4): 476-481

Social media as an impediment to conservation

Social media has increasingly become the most common communication platform between people. Because of this, it is also being used extensively in business and trade and lately it has become an increasingly popular platform to trade legal and illegal wildlife too. The study explores the online trade of otters, a group of globally threatened taxa in Thailand, a country of high global social media use. The authors monitored five Facebook groups for a 14-month period to establish a primary understanding of the scope and scale of the trade. A total of 160 sales posts (337 individual otters) of two species, the Asian small-clawed otter (*Aonyx cinereus*) (81%) and the smooth-coated otter (*Lutrogale perspicillata*) (19%) were recorded. Newborn otter pups accounted for 53% of the offers, whereas young otters accounted for 35%. The average prices amounted to US\$78, with the smooth-coated otter offered at significantly higher prices than the Asian small-clawed otter. Juvenile otters were also significantly more expensive than newborns. Trade appeared to be domestic; however, the potential for international trade cannot be overlooked. Although otters are protected domestically, the trade is easily accessible and prevalent. The results reflect current inadequacies in enforcement and legislation in keeping pace with the rapidly shifting nature of the Internet in Thailand and throughout the global Internet community. A consistent collaborative effort from

consumers, enforcement agencies, and operators is required to address this illicit trade.

Siriwat, P. and Nijman, V. (2018). Illegal pet trade on social media as an emerging impediment to the conservation of Asian otters species. *Journal of Asia-Pacific Biodiversity* **11**(4): 469-475

The gravity of wildlife trade

Unsustainable trade in wildlife products, both legally and illegally, is a leading cause of population declines and increased extinction risk in commercially valuable species. However due to the clandestine nature of illegal trade and limited studies of legal trade our general understanding on international trade networks is patchy. In this study, the authors develop a “gravity–underreporting modelling framework” that they used to analyse and compare: (i) data on the legal trade in mammalian, avian and reptilian products from recorded by The Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) and (ii) data on the seizures of illegal products entering the USA between 2004 and 2013. The results suggested there were substantial differences in the factors driving legal trade for the 3 taxonomic groups considered, indicating different drivers for different product markets. Illegal imports for all groups were associated with increasing exporter GDP. The authors found higher probabilities of underreporting for avian and reptile products, and in general central Africa, central Asia, Eastern Europe and Pacific Island states showed higher underreporting than other regions, indicating the existence of complex trade networks and the potential for the laundering of illegal products through legal markets. The results show the important regional and economic trends driving wildlife trade and the new modelling framework can also help illuminate previously unseen aspects of illegal and legal wildlife trade, which can help with the implementation of interventions to curb the impact of trade on wild populations

Symes, W.S. et al (2018). The gravity of wildlife trade. *Biological Conservation* **218**: 268-276

40 years of Global wildlife trade

Wildlife trade can provide commercial incentives to conserve biodiversity but, if unsustainable, can also pose a threat. CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) aims to ensure international trade in CITES-listed species is sustainable, legal and traceable. However, large-scale temporal and spatial patterns in wildlife trade are poorly known. We address this by analysing the CITES Trade Database: >16 million shipment records for 28,282 species, from 1975 and 2014. Over this period, the volume of reported trade in CITES-listed wildlife quadrupled, from 25 million whole-organism equivalents per year to 100 million, and the ratio of wild- to captive-sourced trade in mammals, birds, reptiles, invertebrates and plants declined by an order of magnitude or more. Our findings start to reveal the scale of the legal wildlife trade, shifting trade routes and sources over time and we describe testable hypotheses for the causes of these changes

Harfoota, M. et al. (2018). Unveiling the patterns and trends in 40 years of global trade in CITES-listed wildlife. *Biological Conservation* **223**: 47-57.

29TH INTERNATIONAL CONGRESS FOR CONSERVATION BIOLOGY

The International Congress for Conservation Biology (ICCB) is a forum for addressing conservation challenges and for presenting new research and developments in conservation science and practice. ICCB connects our global community of conservation professionals and is the major networking outlet for anyone interested in conservation.

The meeting theme, *Conservation Beyond Boundaries: Connecting Biodiversity with Communities, Governments and Stakeholders*, recognizes the challenges of conserving biodiversity across political and cultural boundaries. Biodiversity does not recognize human-drawn boundaries, but the latter can have major impacts on the biosphere through social, political and economic structures. Conserving biodiversity beyond boundaries requires communication and collaboration between countries, government agencies and NGOs, and communities, and across fields of knowledge. Threats to species and ecosystems, such as commercial wildlife trade, infrastructure, and expansion of the human footprint reach beyond boundaries. To achieve targets for sustainable development, conservation solutions must be achieved through collaboration, dialogue and decision-making at local, regional and global scales.



ABOUT SCB & ICCB 2019

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KUALA LUMPUR, MALAYSIA is the ideal site for the 2019 International Congress for Conservation Biology. Biodiversity loss is one of the most urgent environmental issues around the globe and Malaysia is one of the world's mega-diverse countries. It ranks 12th in the world, according to the National Biodiversity Index and is home to 1,141 threatened species, including plants and animals.

ABOUT SCB

Founded in 1986 by conservation leaders such as E.O. Wilson, Thomas Lovejoy, and Michael

Soulé, the Society for Conservation Biology (SCB) proudly serves as the premier international membership society of professionals, students, and non-profit organizations who dedicate their work towards advancing the science and practice of conserving biodiversity. SCB provides the resources needed to maximize the collaborations, professional development, and impact of our more than 4,000 global members.

SCB publishes three of the world's leading conservation peer-reviewed journals - *Conservation Biology*, *Conservation Letters*, and *Conservation Science and Practice* - and provides many benefits to its members, including local, regional, and global networking, a comprehensive Expertise Database, allowing members to identify experts in any conservation field, and online communities (*Conservation Connection*) that provide a globalized approach to maximize member collaboration opportunities and provide communication platforms to address critical issues, advance the conservation profession, and build global, regional, and local capacity. SCB also administers a postdoctoral program, the David H. Smith Conservation Research Fellowship Program, sponsored by the Cedar Tree Foundation.



Society for Conservation Biology



The 29th instalment of the Society for Conservation Biology's International Congress for Conservation Biology will take place in Kuala Lumpur, Malaysia in 21-25th July, 2019. The event will be held at the Kuala Lumpur International Conference Centre and it is anticipated that it will attract up to one thousand participants from across the world.