

VOL. 22 NO. 2

2

TRAFFIC

BULLETIN

HAWKSBILL TURTLE
TRADE IN
PAPUA NEW GUINEA

IVORY IN THAILAND
AND VIET NAM

JUNE 2009

The journal of the TRAFFIC network disseminates information
on the trade in wild animal and plant resources



The *TRAFFIC Bulletin* is a publication of TRAFFIC, the wildlife trade monitoring network, which works to ensure that trade in wild plants and animals is not a threat to the

conservation of nature. TRAFFIC is a joint programme of WWF and IUCN.

The *TRAFFIC Bulletin* publishes information and original papers on the subject of trade in wild animals and plants, and strives to be a source of accurate and objective information.

The *TRAFFIC Bulletin* is available free of charge. Quotation of information appearing in the news sections is welcomed without permission, but citation must be given. Reproduction of all other material appearing in the *TRAFFIC Bulletin* requires written permission from the publisher.

MANAGING EDITOR *Steven Broad*

EDITOR AND COMPILER *Kim Lochen*

SUBSCRIPTIONS *Susan Vivian*
(E-mail: bulletin@traffic.org)

The designations of geographical entities in this publication, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of TRAFFIC or its supporting organizations concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Any opinions expressed are those of the writers and do not necessarily reflect those of TRAFFIC, WWF or IUCN.

Published by TRAFFIC International,
219a Huntingdon Road, Cambridge, Cambs.,
CB3 0DL, UK.

© TRAFFIC International 2009
ISSN 0267-4297
UK Registered Charity No. 1076722

Cover illustration: Hawksbill Turtle
Eretmochelys imbricata
(© WaterFrame)

This page, from top:
Illegal timber stocks. Sebanggan River,
Central Kalimantan, Indonesia.
(© Tanyo Bangun / WWF-Canon);
Leopard skin, Afghanistan (© A.R. Manati);
Hawksbill Turtle carapace mask (© J. Kinch);
Trophy seizure (© TRAFFIC Europe-Russia);
Ivory carving (© D. Stiles).



Mixed Sources

Product group from well-managed
forests and recycled wood or fibre
www.fsc.org Cert no. SA-COC-1527
© 1996 Forest Stewardship Council

Funding for the printing and distribution of this issue of the *TRAFFIC Bulletin* is generously provided by The Rufford Maurice Laing Foundation.

Printed on recycled paper by Portland Print, Kettering, Northants NN16 8UN.

TRAFFIC

BULLETIN

VOL. 22 NO. 2 JUNE 2009

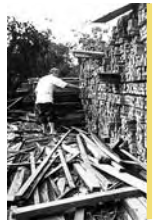
CONTENTS

editorial

47

New action to address
illegal trade in timber

H.K. Chen



news

48

Illegal logging in Madagascar
Workshops
FairWild Foundation
Global Tiger Initiative
Spot check on fur sales in Kabul
Trade in Russian Far East Part 2
ASEAN Wildlife Forensics Project



feature

62

An assessment of the
trade in Hawksbill Turtles in
Papua New Guinea

J. Kinch and E.A. Burgess



seizures and prosecutions

73

A round-up of recent seizures
and prosecutions that have
taken place around the world



feature

83

The status of the ivory trade in
Thailand and Viet Nam

D. Stiles



Over the past three decades, the rate of deforestation around the world has remained at a very high level—about 16 million hectares per year—and, as recent investigations show, degradation of remaining forests is widespread. Timber remains an important global commodity: the value of solid timber-based commodity products (vener, sawn wood, plywood and logs) in international trade was USD46 billion in 2006. The international community is recognizing that trade-related instruments and tools to improve forest governance and conserve forests are more and more relevant. Good forest governance that is transparent and based on legality and sustainability is also a critical element of efforts to reduce the contribution of forest loss and degradation on climate change.

EDITORIAL

In recent years, a number of countries have instituted new legal instruments to combat the entry of illegally harvested and traded timber products into their countries. The USA amended the *Lacey Act* in 2008 to cover timber products and the European Union (EU) is working on the Forest Law Enforcement Governance and Trade (FLEGT) initiatives that include Voluntary Partnership Agreements (VPA) with co-operating producer countries and 'Due Diligence' legislation for all non-FLEGT VPA countries exporting timber products to the region. China, an increasingly important driver in timber trade flows, has defined rules on responsible conduct for Chinese enterprises involved in forestry abroad, and governments around the globe now implement public procurement schemes that take into account a combination of legality and sustainability criteria. Many voluntary certification schemes have also been established for individual concessionaires covering these criteria, including local community ownership of forests. At the same time, countries experiencing rampant illegal logging, such as Indonesia, have signed Memoranda of Understanding with a number of countries to obtain support and collaboration to control the harvesting and illegal timber trade, for example with the USA, UK, China, and Japan. Customs, as the most important agency that controls cross border trade, has the World Customs Organization's SAFE Framework of Standards to standardize protocols for trade, including timber products. Some countries are also encouraging Free Trade Agreements (FTA) to include environmental issues in order to address potential gaps in timber trade controls, for example, the addition of a new annex on forest sector governance in the US-Peru FTA. Preceding all of the above schemes, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) came into force in 1976, and controls the export and import of species listed under CITES through a permit system, that is controlled and monitored by designated government agencies.

However, underpinning all of these international instruments is the need for strong legislative systems, procedures and operations in each country involved, with efficient and effective documentation at each step of the trade chain and strong oversight against abuse of the system.

TRAFFIC has been working on various aspects of such trade chains for several years, and under its new four-year programme (2009-2012) will continue focusing on improving governance and transparency of the timber harvest and trade.

The first priority for international instruments to be effective is the need to ensure that documentation required by Customs in a consumer country reflects the legal systems of the exporting country. This can only happen if all stakeholders are aware of what it means to be legal and there is transparency in implementation of the laws. TRAFFIC has attempted to help address this issue in seven countries—China, Viet Nam, Malaysia, Gabon, Central African Republic, Democratic Republic of the Congo, and Republic of the Congo—through the development of a common framework for assessing legality of timber products in trade through Principles, Criteria and Indicators for use by companies that are members of the WWF Global Forest and Trade Network (GFTN). The evidence-based approach of the common framework operates at each step in the trade chain.

However, governments design their systems and institutions to maximize revenue through royalty and fee collection, while maintaining the resource base. Therefore, it is important that the assessment of legality includes other aspects of laws relating to social, environmental and conservation measures, to ensure a comprehensive framework of legality is used that is broadly applicable across countries rather than one that is solely concerned with forest management and harvest for timber production.

Transparency is the key and if governments are able to implement all their forestry laws in a transparent manner, this will help to reduce many types of illegality—from the source through the entire trade chain. New approaches will be needed owing to the current weaknesses in forest governance and transparency in many tropical and some temperate timber-producing countries. Monitoring should include more participatory and independent multi-stakeholders, and reforms may be needed to ensure local communities and social issues are given sufficient prominence and legal support. New administrative mechanisms may also be needed to link the trade chain in such a way as to reduce incidences of the mixing of unknown and illegal timber with that which is legal.

Development of such tools has hitherto been on an *ad-hoc* basis as issues arise and as governments take heed of them. In order to maximize efficiency, such instruments need to be implemented in a complementary and co-ordinated manner. This will require a major paradigm shift in exporting countries, moving away from maximizing revenue capture through controls and penalties, and instead demonstrating transparency along the trade chain. Put another way, the issue at hand is good governance, from source to market in all sectors engaged in the industry.

Together, this range of new measures, if implemented to their full potential, stand to have a significant impact in curtailing illegal and unsustainable timber trade over the coming years.

Chen Hin Keong Global Forest Trade Programme Leader,
TRAFFIC International

MADAGASCAR

ILLEGAL LOGGING OF ROSEWOOD
IN THE RAINFORESTS OF NORTH-
EAST MADAGASCAR



ILLEGAL LOGGING of precious timber as a consequence of recent political instability in Madagascar is posing a serious threat to the island's north-eastern rainforests, in particular in the national parks of Marojejy and Masoala. Thousands of logs—one reliable source estimates that at least 20 000 trees have been cut—have been confiscated, mostly in the north-eastern ports of Vohémar and Antalaha.

Logging of rare, endemic rosewood trees such as *Dalbergia baronii*, *D. louvelii* and *D. madagascariensis*, is a complex and labour-intensive process, involving impoverished local residents who identify and cut the trees, but receive minimal remuneration (about 1000 Malagasy Ariary/-USD0.49 per trunk) in return for difficult work. The confiscated logs are estimated to be worth several million pounds, and most of the money is pocketed by a criminal network allegedly including corrupt officials, domestic transporters and exporters.

The World Heritage Site of Marojejy National Park was temporarily closed to tourists this year after armed gangs forced park rangers and guides to abandon their posts (often at gunpoint). Communities live in fear following intimidation by the militia and publicizing the situation has not been easy, with some informants having received death threats.

Trees targeted first are those nearest to watercourses. These are then cut into heavy, one-to-two metre logs, or *bola-bola*, tied into bundles and floated downriver to a point from where they are taken by lorry to a port (usually Antalaha and Vohémar). Well-placed sources report that certain government officials have made the process of obtaining 'export certificates' for the timber more expensive, so that they can earn more money for themselves. Certificates for a single container may also be used and re-used for two or three containers.

Logging of these hardwoods has been occurring inside the Masoala and Marojejy national parks for decades, but never to the extent that is happening at present. One source mentioned that between February and April 2009, some 2–3000 people swarmed into Masoala National Park—Madagascar's largest lowland rainforest—to extract wood (principally rosewood).

It may be worth examining an account of the events in mid-April 2009: on 18 April, Vohémar port was shut, and the export of *bola-bola* prohibited. On 19 April, prominent members of the criminal syndicate flew by private aircraft to Antananarivo where they allegedly met with a senior government official. On 20 April, Vohémar port was reopened, and loggers previously gaoled by the police were released. A person well-known to the police used a radio station local to the north-east, or 'SAVA' region, to encourage wholesale logging—of rosewood in particular—in the 'name of democracy', and the convoys of logging lorries resumed operating. Despite a government declaration on 20 April that only 'old' logs could be exported, not the freshly cut trees, it is fairly certain that all the timber in Vohémar will be classified as 'old', and cut 'prior to the political crisis', a source explained.

The terrain in the parks of Marojejy and Masoala are rugged, and the ratio of park rangers to loggers is inadequate—about one park ranger per 100 km²—whereas there are hundreds of loggers in areas of dense rainforest that the loggers claim are inaccessible to the police.

Derek Schuurman freelance journalist and co-author of several guidebooks to Madagascar.

According to IUCN (2009), of Madagascar's 44 *Dalbergia* species, 21 are classified as Endangered and 17 as Vulnerable. According to Patel (2007), a survey and GIS analysis of Malagasy Papilionoideae (a large Leguminosae subfamily) assigned IUCN Red List categories to the three *Dalbergia* species found within Marojejy National Park (Labat and Moat, 2003). Listed as Vulnerable, *D. baronii* and *D. madagascariensis* were barely recorded within five kilometres of protected areas, and the authors noted that large specimens were very scarce due to overexploitation. Even rarer, *D. louvelii* is classified as Endangered; no trees were located within five kilometres of a protected area, and "populations of this rare rosewood are now severely fragmented, and it is selectively felled for the export market" (Labat and Moat, 2003). All three species provide precious hardwood and are harvested for furniture construction abroad, and to a much lesser extent in Madagascar. The term 'rosewood', or *bois de rose* in French, is a reference to the deep, lustrous red wood of *D. baronii* and *D. louvelii* (Patel, 2007). 'Palisandre wood' refers to other *Dalbergia* species such as *D. madagascariensis*, which lack the distinctive red coloration (Du Puy, 2002).

Du Puy, D.J. (2002). *The Leguminosae of Madagascar*. Royal Botanic Gardens, Kew, UK.

IUCN (2009). *2009 IUCN Red List of Threatened Species*. Version 2009.1. www.iucnredlist.org. Downloaded on 1 June 2009.

Labat, J.N. and Moat, J. (2003). Leguminosae (Fabaceae). In: *The Natural History of Madagascar*, Goodman, S.M. and Benstead, J.P. (eds) 346–373. University of Chicago Press, Chicago, USA.

Patel, E.R. (2007). Logging of rare rosewood and palisandre (*Dalbergia* spp.) within Marojejy National Park, Madagascar. *Madagascar Conservation and Development* 2(1):11–16. December 2007.

Photographs: rosewood in logging yards, north-east Madagascar.



N. HUNTER / UK MANAGEMENT AUTHORITY (ANIMAL HEALTH)

CAVIAR TRAINING DAY

The trade in caviar has been identified by the UK National Wildlife Crime Unit (NWCU) since 2008 as one of five priorities addressing illegal trade in CITES species.

In October 2008, the UK Management Authority (Animal Health) organized a training day to prepare its wildlife inspectors to undertake inspections at outlets where caviar is sold. The event, which took place in London, was attended by 16 Wildlife Inspectors, as well as representatives from the UK Border Agency, the Metropolitan Police, the NWCU and experts, including TRAFFIC. Significantly, training was also supported by an industry representative.

The caviar trader opened the day's business by giving her perspectives on the UK caviar trade. The Chief Wildlife Inspector highlighted why illegal trade in caviar has become a priority for investigation and pointed out how illegal trade can be distinguished from that which is legal. TRAFFIC staff gave a presentation on the latest trends in legal and illegal caviar trade and on the status of caviar labelling in the European Union (EU). They described what compliance and enforcement measures relating to caviar have been carried out in other EU Member States, and what problems other countries have encountered when undertaking caviar inspections.

The second part of the day focused on the need to assess the levels of trade in the UK and how this would be achieved by a programme of targeted inspections. Two phases of inspections would be completed. The first phase would involve inspections of wholesale companies that are licensed by the UK Management Authority to process, package or repackage caviar. In the UK these companies primarily repackage caviar and, for the purposes of facilitating marking requirements, are given registration numbers and are required to maintain adequate records of caviar that is imported, exported and re-exported. The second phase would involve inspections of retail outlets. The 16 Wildlife Inspectors being trained to identify *continued over...*



A. REUTER

CITES TRAINING

CITES TRAINING IN CENTRAL AMERICA

Pompilio Campos (above), a reptile expert from Costa Rica, had a captive audience at a TRAFFIC training session on the sustainable management of wildlife and regulation of wildlife trade and enforcement for Central American authorities.

He was one of nearly 20 experts that worked with over 100 participants from 30 different institutions that implement and enforce laws and regulations related to wildlife trade in Honduras, El Salvador, Nicaragua, Costa Rica and Panama, at training workshops carried out in June and October 2008.

TRAFFIC's efforts were welcomed by governments in the region as a clear indication of its commitment to collaborate on wildlife and sustainable practices for the conservation of species in the wild as well as to promote co-operation and communication between countries in this region.

"The training has been useful given that information was directly provided from the experts and other experienced participants. Support materials and documentation with global applicability was provided, as was valuable scientific information. Through the presentation of guides, procedures and materials, this workshop has helped to improve the implementation of CITES," commented Rene Salgado, Director's Assistant, CENDEPESCA, El Salvador, in an evaluation of the workshop.

The TRAFFIC workshops were supported by the US Department of State through the Dominican-Republic-Central America Free Trade Agreement and the US Agency for International Development's Central American Watersheds Project, in partnership with the WWF Central America office.

TOP LEFT: UK WILDLIFE INSPECTORS AND OTHER PARTICIPANTS BEING SHOWN CAVIAR SAMPLES BY LAURA KING OF KING'S FINE FOOD, A CAVIAR RETAILER, AT THE CAVIAR TRAINING DAY IN OCTOBER 2008. TOP RIGHT: REPTILE EXPERT AND PARTICIPANTS AT THE TRAFFIC TRAINING SESSION ON SUSTAINABLE MANAGEMENT AND REGULATION OF WILDLIFE, COSTA RICA, 2008.



G WORKSHOPS

CAPACITY-BUILDING ACTIVITIES IN MEXICO

Mexican officials from the Federal Police (PFP) and General Attorney for the Protection of the Environment (PROFEPA) (above) were among the 180 government staff that benefited from practical training in wildlife trade enforcement in the country in November 2008. The events formed part of a three-year project aimed at strengthening the capacities of authorities in charge of enforcing wildlife-related laws and regulations in Mexico, with an emphasis on wildlife trade and the implementation of CITES. Other participating institutions included Mexico's Attorney General, the Federal Investigations Agency and Customs.

Along with general wildlife trade and specialized training workshops, TRAFFIC distributed a large array of state of the art identification materials, developed training modules on priority topics, and donated more than 2290 safety and animal handling tools and equipment to all wildlife inspectorates in the country.

"Training, information on working methods and the tools provided, along with extensive sharing of experiences and diverse viewpoints among experts and participants, is extremely useful to improve our job performance, and support better decision-making in our day-to-day activities" said Francisco Javier Altamirano, PROFEPA Federal Inspector in Chihuahua, Mexico.

More than 200 staff have benefited from practical training in wildlife trade law enforcement in the country during the course of this three-year project, which is led by TRAFFIC in close collaboration with the Seaports, Airports and Borders Programme of PROFEPA, and largely supported by the Strategic Programmes Fund of the United Kingdom.

Adrian Reuter National Representative,
TRAFFIC North America-Mexico

TOP LEFT: SPECIMEN HANDLING AND TRAINING IN IDENTIFICATION FOR LAW ENFORCERS IN NORTHERN MEXICO. TOP RIGHT: TRAFFIC DONATED OVER 2290 SAFETY AND ANIMAL HANDLING TECHNICAL TOOLS TO PROFEPA TO STRENGTHEN 72 INSPECTORATES IN MEXICO.

continued... caviar are geographically spread across the UK. Prior to the training day they had been tasked to identify local retail outlets in the areas in which they live where caviar was believed to be traded, as these premises do not need to be licensed to trade in caviar. As a result, nearly 60 outlets ranging from restaurants to delicatessens, airports and cruise liners were identified for inspection.

The training day concluded with an outline of how inspection of both repackaging and retail outlets needed to follow a consistent approach. In order to achieve this, specific questionnaires were developed for the different types of premises. Wildlife Inspectors were told how to take samples of caviar for DNA analysis.

Following the training day, the inspection programme was completed, as detailed, with some significant findings. All repackaging companies were visited and 24 samples of caviar were taken for DNA analysis; twelve samples were also taken from retail outlets. Investigations are continuing and further details and results of the DNA analysis are not available at this stage. As a result of these visits, two companies were found to be no longer repackaging caviar and have had their licences cancelled.

Feedback from the Wildlife Inspectors following the inspections shows that the traders were supportive of the approach that the UK Management Authority (Animal Health) has taken. As a direct result of these inspections there has been a significant flow of information to Animal Health that would not otherwise have been achieved.

A representative from the UK Management Authority (Animal Health) also presented the results of these inspections at the 17th meeting of the EU Enforcement Group, which brings together enforcement authorities from all EU Member States. This provided the opportunity for the UK to share its experiences with other countries planning to conduct similar enforcement actions in the caviar sector.

Amélie Knapp Programme Officer, TRAFFIC Europe and
Nevin Hunter Chief Wildlife Inspector, UK Management Authority (Animal Health)



INTERNATIONAL EXPERT WORKSHOP ON CITES NON-DETRIMENT FINDINGS

In order to export specimens of a species listed in CITES Appendix I or II, the CITES Scientific Authority of the exporting country must determine that the export will not be detrimental to the survival of that species. CITES Scientific Authorities are continually challenged to develop these Non-Detriment Findings (NDFs) and to define what information and parameters are most relevant to determine this. At the 14th meeting of the Conference of the Parties to CITES (CoP14), the Parties were encouraged to provide financial support for an international expert workshop on NDFs which would identify methods, tools, information and expertise to improve the making of NDFs.

In November 2008, an International Expert Workshop on Non-Detriment Findings was held in Mexico (Cancun, Quintana Roo). The main goal of the workshop was to provide guidance to CITES Authorities relating to the processes, methodologies and information needed to formulate NDFs by building on existing work, so that the central provision that an NDF required for the export of Appendix I and Appendix II species can be better implemented.

The workshop was attended by 103 participants coming from 33 countries of all six CITES regions. Experts from CITES authorities, academic and scientific institutions and other conservation organizations were invited to contribute case studies on current or potential approaches to making NDFs and to participate at the workshop. Nine working groups, which focused on life-forms and taxonomy of species included in the CITES Appendices, analysed taxon-specific aspects of NDF formulation taking the case studies as a starting point. Discussions allowed participants to share information, knowledge and experiences about the different ways by which NDFs are currently being formulated and about how this could be achieved in a practical and effective way in the future.

The workshop set out to deliver two main products: general guidelines (principles and criteria) that summarize the different approaches and paths followed by Scientific Authorities along the NDF decision-making process; and taxon-based guidelines (principles and criteria) for developing NDFs for taxa commonly found in trade.

Other products that derived from the workshop and have great value for all CITES Parties are the compilation of background documents and 60 case studies showing different approaches to the development of NDFs, as well as an experts directory with contact information for future collaboration efforts within CITES NDF formulation.

TRAFFIC was deeply involved in the workshop through the active participation of eight of its staff, and provided support at all levels: as part of the Steering Committee; as experts and co-chairs of different working groups; through the preparation, revision, translation and presentation of case studies; as part of the support team by rapporteuring at working group sessions; and arranging financial support to ensure the participation of Central American experts.

The results of the workshop were presented at the recent meetings of the CITES Plants and Animals Committees (see over).

< PARTICIPANTS AT THE
INTERNATIONAL EXPERT WORKSHOP
ON CITES NON-DETRIMENT
FINDINGS.

CANCUN, MEXICO,
17-22 NOVEMBER 2008

Further information on
the workshop is available
on the official workshop
website at:

[www.conabio.gob.mx/institucion/
cooperacion_internacional/Taller
NDF/taller_ndf.html](http://www.conabio.gob.mx/institucion/cooperacion_internacional/TallerNDF/taller_ndf.html)



Photographs from the meeting: Adrian Reuter



Non-Detriment Findings (NDF):

Discussions at the meetings of the CITES Plants and Animals Committees

The meetings of the CITES Plants and Animals Committees (PC18 and AC24), which were held in March/April 2009, respectively, assessed the results of the NDF workshop, with a view to their possible endorsement and submission for consideration at the 15th meeting of the Conference of the Parties (CoP15) in 2010.

Following a suggestion by the PC to develop documentation that could assist Scientific Authorities in the making of NDFs, an AC working group recommended that a notification be issued to Parties incorporating a questionnaire and inviting comments on the proceedings of the International Expert Workshop on NDFs. The AC working group agreed that the results of the questionnaire set out in the above-mentioned notification would further inform deliberations on this issue. Both Committees recognized that capacity building with regards to making NDFs is an important issue. They recommended that the Secretariat specify to Parties that any NDF capacity issues be identified when co-ordinating regional meetings.

While acknowledging that the making of NDFs is primarily a matter for the Parties, the PC also proposed a draft resolution that could draw attention to the outcomes of the workshop and the reference manual to encourage Parties to take these into account while making NDFs. The AC working group developed a set of draft decisions to take the work forward after CoP15. The rationale for these decisions is: engage the Parties and the Scientific Committees more fully in their consideration of the outcomes of the workshop; elaborate on these outcomes, incorporating other work on the making of NDFs; and, ensure that the 16th meeting of the Conference of the Parties (CoP16) considers the results of this work in more detail.

Both Committees will prepare a discussion paper for consideration at CoP16 with options on how to use the workshop outputs.

*Paola Mosig Programme Officer,
TRAFFIC North America-Mexico*

FAIR AND SUSTAINABLE FUTURE FOR WILD PLANTS: ISSC-MAP MERGES WITH FAIRWILD FOUNDATION

Implementation of the International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants (ISSC-MAP) received a major boost in October 2008 with the agreement to combine ISSC-MAP with the “fair trade” standard developed by the FairWild Foundation. The new FairWild Standard provides a unified modular system of both standards’ requirements for assessing harvests of wild plants against ecological, social and economic requirements. Use of the FairWild Standard will support efforts to ensure plants are harvested and traded in a way that maintains healthy populations in the wild and benefits rural producers.

The agreement to join ISSC-MAP with FairWild Foundation was formalized during the IUCN World Conservation Congress (October 2008) with the signing of an agreement with the FairWild Foundation by representatives of ISSC-MAP’s four founding institutions: the German Federal Agency for Nature Conservation (BfN), IUCN, WWF Germany, and TRAFFIC. The application and further evolution of the combined FairWild Standard will be overseen by the FairWild Foundation, with IUCN, WWF and TRAFFIC each having initial representation on the Foundation’s governing and technical bodies, alongside representatives from the organizations involved in FairWild Foundation’s founding: SIPPO (Swiss Import Promotion Programme), Forum Essenzia e.V and IMO (Institute for Market Ecology).

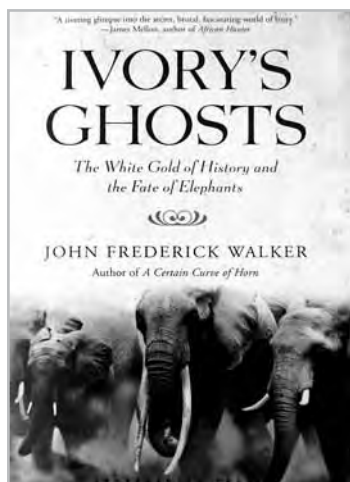
A third party certification system is being implemented that allows communities and businesses to confirm and communicate to the public that their harvesting practices meet the FairWild sustainability and social criteria. Several enterprises are on the way to meet these criteria, e.g. in Europe, Asia, and South America, with FairWild certified herbal products expected to begin to appear in the European and North American markets by 2010.

It is hoped that use of the FairWild Standard will extend beyond certification, and include application of ISSC-MAP criteria by local resource managers in designing harvest strategies, government agencies designing harvest and trade controls, and businesses and industry associations developing voluntary codes of practice.

A single standard, a growing portfolio of projects

The bringing together of the ISSC-MAP and fair trade standards has also provided the opportunity to forge links between the various pilot projects already under way to assess their applicability under different local conditions, and to develop and refine associated guidance documents and training tools.

With financial support from the German Federal Ministry for Economic Cooperation and Development (BMZ), TRAFFIC, WWF, IUCN and others are implementing seven projects under the joint initiative “Saving Plants that Save Lives and Livelihoods”. Projects focused on applying ISSC-MAP are under way in Brazil (with additional support from the IUCN Livelihoods and Landscapes Strategy), Cambodia, India, Lesotho, Nepal and Bosnia and Herzegovina. Funding has also been secured from the EU-China Biodiversity Programme to undertake similar work in China. Projects focused on applying FairWild’s “fair trade” standard are under way in Bosnia and Herzegovina, Croatia, France, Kazakhstan, Macedonia, and Uzbekistan. More detailed information about selected implementation projects is provided on page 55.



IVORY'S GHOSTS:

The White Gold of History and the Fate of Elephants

by John Frederick Walker

Atlantic Monthly Press, New York, 2009. 312pp. USD25.

ISBN 978-0-87113-995-5

Review by Daniel Stiles

This fascinating and well-researched book tackles one of the thorniest conservation conundrums that has been challenging wildlife policy-makers and managers—and animal lovers—for decades: what to do with elephant tusks?

The history and survival of the elephant are intertwined with its two biggest teeth. How those “ivories” have been used over the centuries and how they will be dealt with in future have crucial relevance to elephant conservation. The author recognizes that the long and complex history of mankind’s use of ivory has left a momentous cultural and economic legacy that cannot simply be excised by a trade ban, as CITES has tried to do. As Walker says: “As long as there are elephants, there will be ivory.”

The book is divided into three parts. The first part is an exhaustive history of all that is known of mammoth and elephant ivory use and trade from the prehistoric and historic periods up to the 18th century. Ivory was probably mankind’s earliest luxury material, and it has been used to make artistic and utilitarian objects since the origin of *Homo sapiens*.

The second part examines the industrialization of ivory from the 19th to the mid-20th century. Europe and the USA were using enormous amounts of ivory in factories to produce millions of buttons, combs, piano keys, billiard balls and dozens of other types of items. European and American hunters, along with Arabs and Africans, were working feverishly to kill elephants to supply the market. This section records the tragic price that both elephants and people paid to keep the industry going. Ironically, as industrialists in the West supported the abolition of slavery, it was slaves that carried the huge tusks out from Africa’s interior to East and West African ports, whence they were shipped to the abolitionists’ factories.

The third section treats in detail the emergence of efforts to save the elephant from the curse of its tusks.

Zoologists began to study elephant behaviour scientifically and discovered that elephants have many attributes in common with humans. The conservation movement started in the 1960s at the same time that economic development in Japan and Hong Kong stimulated ivory use. In the 1970s these two markets were importing 75% of the world’s ivory and massive elephant killing continued in Africa and Asia. By 1975, when CITES was created, the global elephant population was fewer than 1.5 million, probably less than 10% of what it was a century earlier. Much of the loss was due to ivory trade.

In spite of these elephant losses, Walker documents how human population growth and expansion into elephant territory has resulted in increasing human-elephant conflict. Elephants cause huge problems for poverty-stricken rural Africans, and the author presents poignant personal stories of suffering at the feet and mouths of elephants. In some countries where wildlife management measures have been successful, elephants confined to protected areas are outstripping the ability of the land to support them and other wildlife. Walker shows effectively how the elephant conservation issue is complicated by the fact that in some places there appear to be too many elephants, while at the same time in other areas elephants are being poached to extirpation.

The third section also discusses the development in the 1980s of the two opposing views about ivory trade and elephant conservation that are still with us today. Animal welfare organizations and the general public, informed by them, believe that the only way to save elephants is to stop trade in ivory. Many wildlife conservation organizations and resource economists argue that trade in ivory can work to the benefit of elephant conservation. Walker appears sympathetic to both sides, but following a lengthy examination of the arguments and views of experts on both sides, many of whom he interviewed, he finally concludes: “Now, surely, it is ivory’s turn to help ensure that there will always be elephants.”

An epilogue follows the three sections that presents the controversy surrounding the CITES approval of Japan and China to buy 108 tonnes of ivory from four southern African countries, which took place in late 2008. While recognizing the risk that the trade poses, the author believes somewhat hopefully that with “vision, courage, regulation and political will” Africans and elephants both will be able to benefit from trade in white gold.

A weakness of the book is the concentration on African Elephants, and very little discussion of the Asian Elephant or ivory working in Asia and Europe. The first point is not that serious, however, considering that about 85% of the world’s wild elephants are in Africa.

Anyone wishing to understand in depth the controversy surrounding the trade in ivory should read this book. It is well written and copious end-notes provide sources for further information.

Fair and sustainable future for wild plants: ISSC-MAP merges with FairWild Foundation
..continued from page 53

PROGRESS ON FAIRWILD IMPLEMENTATION PROJECTS

Bosnia and Herzegovina

In south-eastern Europe, a major source of medicinal and aromatic plants collected in Europe, a FairWild implementation project is being finalized in Vlasenica Region in the eastern part of Republica Srpska (Bosnia and Herzegovina). A management plan for Wild Garlic *Allium ursinum* is being developed in consultation with a wide range of stakeholders. Elmar d.o.o.—a partner collecting company—supports FairWild implementation and continuous species monitoring.

Brazil

An implementation project in Silves Municipality/Saraca Island (State of Amazonia) involves a local community-based organization AVIVE, which collects and processes wild medicinal ingredients. The current implementation project focuses on five species: Andiroba *Carapa guianensis* and Andirobinha *Carapa procera* (used to treat fever, worms, bacterial infections, rheumatism and tumours); Buriti Palm *Mauritia flexuosa* (used to produce sun creams and skin protection lotions); Puxuri *Licaria puchury* (used to treat stomach disorders, insomnia and rheumatism); and Preciosa *Aniba canellila* (an essential oil appreciated for its scent). A preliminary agreement has been signed with a buyer company in Brazil, which is interested in the procurement of FairWild products.

The project is developing mechanisms for community-based resource management and aims to work with responsible companies, government agencies and academic experts to establish a model for the sustainable use of medicinal plants that can be replicated throughout Amazonia.

China

Species of *Schisandra sphenanthera* (used in traditional Chinese medicine (TCM) as an astringent tonic for lungs and kidneys, and in dietary supplements such as energy drinks), and *Gastrodia elata* (used for medicines treating epilepsy, tetanus, liver disorders and arthritis), are at the core of an implementation project in Upper Yangtse Ecoregion, in the frame of a larger European Union-funded programme. Through capacity-building of stakeholders involved in medicinal plant harvesting and trade, the project aims to increase sensitivity towards the needs of habitat conservation and management planning and create the basis of sustainable sourcing schemes for medicinal plant species in the region. Market interest for FairWild products is fuelled by the upcoming participation in Green Expo 2009, targeted at “green” Japanese consumers.

Kazakhstan

Liquorice *Glycyrrhiza glabra* collected near Karaschida River, Kazakh Steppe eco-region (south-eastern Kazakhstan) has met the minimum criteria for FairWild certification. Although Liquorice is abundant at the collection site, it has declined as a result of overharvest in



ORGANIC LICORICE ROOT

A HERBAL MEDICINAL PRODUCT
TO BE LAUNCHED IN
CANADA WITH FAIRWILD®
CERTIFICATION.

Photo: Traditional Medicinals

many other areas. Formalization of sustainable wild collection practices is needed urgently. Recommendations derived from the first external audit visits include the development of a risk assessment, a more formalized resource assessment and the development of a local management plan.

Lesotho

The FairWild Standard is being applied to *Pelargonium sidoides*. This plant is traditionally used in Lesotho and South Africa to treat colic, diarrhoea, stomach disorders, and dysentery, and is increasingly in demand for the preparation of medicine in Europe, in particular Germany. Based on the resource assessment and the regeneration study, it is clear that sustainable harvesting methods can be developed. This may include setting harvesting quotas and the development of an effective system of harvest control.

Link to the latest news about FairWild development:
www.fairwild.org

Contact:

Britta Pätzold, Susanne Honnef
FairWild Foundation Secretariat
c/o WWF Germany and TRAFFIC
Rebstöcker Str. 55
Frankfurt a.M., Germany, D-60326

Anastasiya Timoshyna Medicinal Plants Officer,
TRAFFIC Europe, Central Eastern Project Office



FAIRWILD FOUNDATION BOOTH AT BIOFACH-09,
THE WORLD'S LARGEST ORGANIC TRADE FAIR, FEBRUARY 2009.

ANASTASIYA TIMOSHYNINA

INVESTING IN THE TIGER'S FUTURE

The Global Tiger Initiative

Tigers are facing one of the gravest tests for survival in their history. Populations are in marked decline in nearly every corner of their rapidly shrinking range, fuelled by affluence in Asia and a corresponding demand for their body parts for medicine and fashion. There is a universal recognition of the urgent need to change the approaches to habitat and biodiversity conservation, and how they are co-ordinated and implemented—on their own, international conservation organizations and individual governments and institutions have failed the Tiger in most cases. Most importantly, if the major drivers of habitat loss and demand are to be arrested, closer collaboration is needed with the very institutions, governments, businesses, and consumers responsible for speeding up the destruction of forests to make way for roads or dams and which create wildlife trade opportunities, threatening not only Tigers but also the rich biodiversity that their habitats support.

Following discussions between the World Bank, Global Environment Facility (GEF), Smithsonian Institute, Save the Tiger Fund and conservation groups, a major effort was launched in Washington DC on 9 June 2008 by a global coalition of partners, scientists and celebrities—led by the World Bank—called the Global Tiger Initiative (GTI). Since its launch, it has gained momentum and is now an international collaboration dedicated to saving wild Tigers and ensuring that biodiversity conservation—and Tigers in particular—are greater priorities in development project planning and implementation.

The GTI aims to build greater awareness of the fact that maintaining Tigers and other important species and their supporting ecosystems is essential to ensuring the health, wealth and ecological security of human

populations everywhere. The main thrust of their work is to find ways to limit impacts on Tiger habitat, arrest poaching and trade, reduce consumer demand and generate significant resources and high level commitments to reverse the decline in Tiger populations. One of the most important elements of the GTI in the short term is to convene a Year of the Tiger Summit in 2010 that will bring the highest level political commitment from governments to save Tigers in the wild. Conservation groups like WWF are investing a great deal to make sure that the Tiger Summit happens and will set in place a series of actions to catalyze a range-wide recovery for the Tiger. In the lead up to the Summit, there will be a Global Tiger Workshop in Kathmandu, Nepal, organized by IUCN, the CITES Secretariat and the Global Tiger Forum. It will bring together the world's Tiger experts, government agencies, international bodies and conservationists to agree on a holistic solution to the crisis affecting Tigers.

It is clear that the commitments of the alliance of GTI partners consist of more than just words—significant funds and activities are now being allocated in support of the goals of the GTI. On 6 March 2009, the World Bank, GEF, and the Wildlife Conservation Society (WCS) announced the commitment of USD2.8 m to support *Tiger Futures*, a new project dedicated to conserving wild populations of Tigers. TRAFFIC and WWF are partners in the project, which will be led by WCS. The funds will support activities aimed at helping to build consensus to conserve Tigers beyond the Year of the Tiger Summit as well as promote dialogue between range States, and help to reduce illegal wildlife trade along priority smuggling routes and in black markets.

Crawford Allan Regional Director,
TRAFFIC North America



“ Just as with many of the other challenges of sustainability—such as climate change, pandemic disease, or poverty—the crisis facing Tigers overwhelms local capabilities and transcends national boundaries. This is a problem that cannot be handled by individual nations alone. It requires an alliance of strong local commitment backed by deep international support. ”

Robert B. Zoellick,
World Bank Group President,
pictured right of photo with the actor, Harrison Ford, and a group of children at the launch of the Global Tiger Initiative, in June 2008 at the Smithsonian National Zoo.



FEMALE SNOW LEOPARD WITH OFFSPRING, COLOGNE ZOO, 2003. H. FELLNER

The Trade in Leopard and Snow Leopard Skins in Afghanistan

A.R. Manati

Introduction

Afghanistan contains some of the most interesting and diverse habitats in the world—from deserts to high mountains—and supports a rich fauna. Of the 120 species of mammals (Habibi, 2003), there are 29 species of carnivores, among them: Jungle Cat *Felis chaus*, Wild Cat *Felis silvestris*, Leopard Cat *Prionailurus bengalensis*, Pallas's Cat *Otocolobus manul*, Caracal *Caracal caracal*, Himalayan Lynx *Lynx lynx isabellina*, Snow Leopard *Uncia uncia*, Leopard *Panthera pardus* and Cheetah *Acinonyx jubatus venaticus*. Skins of all these CITES species are to be found for sale in the country's markets, including species that have not been seen in the country for several decades, such as the Cheetah (Manati and Nogge, 2008), and in spite of the fact that Afghanistan acceded to CITES in 1985 and has made provision for the implementation of the Convention in its national legislation. The object of this study was investigation of the trade in skins of Leopards and Snow Leopards.

Methods

Over a period of four years—2004 to 2007—surveys were conducted at the bazaars of some of the country's major cities to investigate the sale of furs of spotted wild

Year	Leopard	Mean Price (USD)	Snow Leopard	Mean Price (USD)
2004	28	825	24	583
2006	44	1037	21	652
2007	13	880	5	860
Total	85		50	

Table 1. No. of different individual skins of Leopards and Snow Leopards on offer and mean prices in the market of Kabul, over the whole of 2004 and single inspections in 2006 and 2007.

cats, in particular Leopards and Snow Leopards. During April to December 2004, a total of 11 shops in Kabul, seven of which were located in Chicken Street—the city's principal shopping area for tourists—were visited weekly, or more frequently, to evaluate the trade in furs of wild cats. The number of furs purchased and sold over this period was recorded. These figures are mainly based on information from interviews with traders and much of the information, such as on the origin of the products, prices and clients, was gathered from the shopkeepers. Furs were photographed and measured, and samples of hair taken for later molecular genetic examination in the frame of a Ph.D. thesis (Manati, 2008). Further surveys were carried out in Kabul in April/May 2006 and in June 2007.

In November 2004, the markets in four major cities in northern Afghanistan—Mazar-e-Sharif, Kunduz, Taloqan and Faizabad—were surveyed. A second trip to northern Afghanistan, in April 2006, included visits to Baharak and Ishkashem in the eastern part of the province of Badakhshan.

To estimate the impact of hunting on the free-ranging population of Snow Leopards in Afghanistan, software called VORTEX, developed by the IUCN/SSC Conservation Breeding Specialist Group (CBSG) for their Population and Habitat Viability Analysis (PHVA) workshops, was applied.

Results

In 2004, a total of 28 Leopard skins and 24 Snow Leopard skins were seen being offered in the shops surveyed in Kabul, for an average price of USD825 and USD583, respectively (Table 1). In addition, 25 skins of Himalayan Lynx and 321 skins of various other wild cat species were recorded. There was no difference in availability in different months of the year.

In 2006, during a single inspection at the market in Kabul, 44 Leopard skins were being offered for sale, almost twice as many different individual skins on offer as in the whole of 2004. Prices had also increased over the two years by 20%, to an average of USD1037 per skin. The number of Snow Leopards recorded at this inspection was 21, approximately corresponding to the figure for the whole of 2004 for different individual skins on offer. The prices of Snow Leopard skins had also increased, to an average of USD652 per skin.

In 2007, the authorities had started to take action to control the trade in endangered species in Kabul and this improvement in enforcement was reflected in the drop in the number of furs being offered for sale at the same market, to 13 Leopards and five Snow Leopards (Table 1). Shopkeepers therefore displayed only samples, but more skins were reported to be concealed and stored in stock rooms. They were also hesitant in giving any more information on the extent of their trade in skins of endangered wild cats. However they confirmed that the demand for these skins by their clients—without exception foreigners looking for exotic souvenirs—was undiminished, with equal interest in skins of Leopards and Snow Leopards. This enduring demand can also be concluded from the prices paid: an average USD880 for a Leopard skin and USD860 for a Snow Leopard skin (Table 1).

The origin of the skins could only be identified by information from the shopkeepers. The 85 Leopards had been collected from nine provinces, from west to east: Herat (29), Badghis (4), Faryab (1), Ghor (1), Bamiyan (1), Balkh (3), Samangan (6), Badakhshan (20) and Laghman (11). Six skins had been imported from Kashmir (Pakistan); three were of uncertain origin, two of which were said to have come from Africa. Among the 50 skins of Snow Leopards, 44 originated from Badakhshan, two from Takhar and four from Laghman.

Table 2 summarizes observations from northern Afghanistan. In 2004, skins of 22 Leopards and 27 Snow Leopards were seen and in 2006, skins of 12 Leopards and 27 Snow Leopards were recorded.

It is difficult to estimate the impact of hunting on the wild populations of Leopards and Snow Leopards. While the number of Leopards present in Afghanistan is unknown, on the basis of their findings from the Afghan Pamir, Khan and Habib (2006) estimate that there are a total of between 100 and 200 Snow Leopards in the country. Their estimated figures have been applied in the VORTEX simulator, with results showing, in the best-case scenario assuming a wild population of 200 animals and an annual harvest for the fur trade of only 20 specimens, that this species will be extinct in Afghanistan within ten years. It is the author's opinion that the wild population of Snow Leopards is likely to be larger and therefore ten years may be an underestimate.

Province	2004		2006	
	Leopard	Snow Leopard	Leopard	Snow Leopard
Balkh	13	7	3	3
Kunduz	2	7	2	2
Takhar	4	6	1	5
Badakhshan	3	7	6	17
Total	22	27	12	27

Table 2. No. of different individual skins of Leopards and Snow Leopards on offer in the markets of the northern provinces of Afghanistan, 2004 and 2006.

Discussion

The good news revealed by this investigation is that after almost three decades of war, the Leopard and the Snow Leopard can still be found in Afghanistan and throughout their range of distribution. The bad news is that the trade in furs of endangered species, which had come to a complete halt during this period of war, has revived since the end of 2001 and, moreover, is flourishing on an even larger scale than before the war (Niethammer, 1967; Rodenburg, 1977). It would appear that demand is so high that Leopard skins are imported from both Pakistan and African countries. Imports of Snow Leopard skins were not found. Ironically it is the very people who come to Afghanistan to help rebuild the country who are driving the demand. Afghans never buy these skins. Since there are currently so many foreigners not only in Kabul but all over the country, furs are found for sale today in the bazaars of all the major cities. It is encouraging, however, that the conservation authorities



SKINS OF A SNOW LEOPARD AND A LEOPARD DISPLAYED IN A FUR SHOP IN KABUL, 2004.

A.R. MANATI

in Afghanistan have realized this development and by 2007 had started to control the market.

A purely scientific question has been concerned with the identification of Leopard subspecies occurring in Afghanistan. According to Kullmann (1968), four subspecies can be found in the country: *Panthera pardus saxicolor*, *P.p. dathei*, *P.p. sindica* and *P.p. millardi*. These subspecies were established on morphological and anatomical attributes, sometimes on the basis of one or two specimens. A revision of the species using analysis of DNA, however, concludes that all Leopards in Afghanistan belong to only one subspecies: *P. pardus saxicolor* (Miththapala *et al.*, 1996, Uphyrkina *et al.*, 2001). However, it should be noted that such investigations depended mainly on samples of zoo animals whose origin was uncertain in some cases. By contrast, the author's own investigations (Manati, 2008) were based on analysis of samples collected from wild specimens in the country. Nevertheless, the author has been able to confirm the findings of Miththapala *et al.*, (1996) and Uphyrkina *et al.*, (2001), with the exception of his finding that distribution of the Indian Leopard *P.p. fusca* reaches into east Afghanistan.

References

- Habibi, Kh. (2003). *Mammals of Afghanistan*. Zoo Outreach Organization, Coimbatore, India, Pp.1–168.
- Khan, J.A., and Habib, B. (2006). Status of Large Mammals in Proposed Big Pamir Wildlife Reserve in Wakhan, Afghanistan. Annual Report 01, WCS and USAID Biodiversity Conservation in Afghanistan. Pp.1–45.
- Kullmann, E. (1968). *Über Leoparden Afghanistans und ihre Parasiten*. Z. Kölner Zoo 10:126–135.
- Manati, A.R. (2008). Der Handel mit Fellen von Großkatzen und die Abklärung der Unterartenfrage beim Leoparden in Afghanistan. Ph. D. Thesis, University of Cologne. Pp.1–93. http://kups.ub.uni-koeln.de/frontdoor.php?source_opus=2517
- Manati, A.R. and Nogge, G. (2008). Cheetahs (*Acinonyx jubatus venaticus*) in Afghanistan. *Cat News* 49:18.
- Miththapala, S., Seidensticker, J., and O'Brian, S.J. (1996). Phylogeographic subspecies recognition in leopards (*Panthera pardus*): molecular genetic variation. *Conservation Biology* 10:1115–1132.
- Niethammer, J. (1967). Pelztierfelle im Basar von Kabul/Afghanistan. Das Pelztiergewerbe N.F. 18:7–9.
- Rodenburg, W. (1977). The trade in wild animal furs in Afghanistan. Field Document FAO: DP/AFG/74/016. Pp.1–37.
- Uphyrkina, O., Johnson, W.E., Quigley, H., Miquelle, D., Bush, M., and O'Brian, S.J. (2001). Phylogenetics, genome diversity and origin of modern leopard, *Panthera pardus*. *Molecular Ecology* 10:2617–2633.

Dr Abdul Razaq Manati Department of Biology, Faculty of Science, University of Kabul, Afghanistan.

WILDLIFE IN THE WILDERNESS: *Illegal trade jeopardizes unique biodiversity in Russian Far East*

Part 2

In the last issue of the *TRAFFIC Bulletin* (Vol. 22 No. 1), we published the first part of a summary of a report *Wildlife trade in the Russian Far East: An overview*, published by TRAFFIC Europe-Russia in 2007 and based on materials collected over many years by officials of the Far Eastern Customs Directorate, WWF-Russia Far Eastern branch and TRAFFIC. It was hoped that the information contained in the report would help Customs officials, environmental authorities and law enforcement officials in their work of preventing poaching and illegal trade of animals and plants.

In the second part summarizing that report, the authors describe below what is being done by agencies and NGOs to halt the illegal trade in wild species and how the joint efforts of TRAFFIC and WWF have helped agencies in their struggle against illicit trafficking of wildlife specimens through the Far-eastern part of the Russian border.

CITES implementation in Russia

Despite being party to CITES and thereby agreeing to the requirements of the Convention, the Russian Federation does not have adequate national legislation to control trade within its national borders. Control of trade in CITES species therefore relies on the vigilance of Customs officials at the borders.

In the Russian Far East, responsibility for ensuring exporters comply with CITES requirements lies with the Far Eastern Customs authority: preventing the smuggling of CITES specimens across Russian Customs frontiers is the responsibility of operational Customs subdivisions, such as regional Customs Directorates, which also have field subdivisions, called, simply, "Customs". Policy concerned with CITES implementation is established at the federal level. At the regional level, Customs Directorates adapt federal policy to regional requirements and issue necessary directions for implementation. The practical border work for CITES implementation is carried out by field subdivisions. For example, intercepting illicit traffic of CITES specimens is assigned to the clearance and search departments of the Customs field subdivisions.

When implementing CITES, Customs authorities are governed by Russian Government *Decree No. 1051* of 13 September 1994: *On measures for enforcement of the Russian party obligations that arise from the Convention on International Trade in Endangered Species of Wild Fauna and Flora of March 3, 1973*. Exporters who violate procedures established for the export of CITES-listed fauna and flora species are sanctioned in accordance with the Russian Criminal Code or the Russian Code of Administrative Violations. While the Russian Customs Code refers to the order of Customs transactions, all punishments are qualified and described in both the

Russian Criminal Code and the Russian Code of Administrative Violations. New penalties, ranging from fines of between USD4000 and USD20 000 for the illegal harvest of species listed in the Russian *Red Data Book*, were decreed by the Russian Government in 2008.

Activities of Customs and other law enforcement authorities in the Russian Far East, 1999 to 2008

In 2001, a team was established as part of the specialized anti-poaching inspection "Tiger" task force of the Federal Environmental Ministry in the Primorsky Krai territory. The major tasks of this group were to:

- stop the smuggling of animal and plant specimens into the Russian Federation;
- assist Customs and other law enforcement authorities in preventing the clandestine export of CITES specimens from the Russian Federation; and
- stop traffic within the Russian Federation of illegally imported CITES specimens.

While dealing with the first of these tasks has yielded positive results, efforts to stop the illicit traffic within the Russian Federation need to be intensified.

It should be noted that almost every year, the local agencies of the Ministry of Internal Affairs and the Federal Security Services launch initiatives aimed at stopping illicit traffic of particular CITES specimens, namely: wild ginseng roots (listed in the Russian Red Book and CITES II), sturgeon products (CITES I/II), and parts of Amur Tiger *Panthera tigris altaica* and Far Eastern Leopard *P. pardus orientalis* (both CITES I).

The principal weakness in the ability to control CITES trade in the Russian Far East (and the country as a whole), however, is the absence of CITES knowledge by the staff of these agencies, especially Customs. WWF-Russia/TRAFFIC Europe-Russia has tried to fill this gap and assist Customs in CITES implementation. Consequently, TRAFFIC Europe-Russia, in collaboration with the Amur branch of WWF-Russia, has built strong working relations with the Far Eastern Customs Directorate, and the Far Eastern Customs Operative. In November 2007, a special agreement was signed between WWF/TRAFFIC and the Vladivostok Branch of the Russian Customs Academy (VB RCA) concerning the conservation of rare and endangered wildlife species and control over natural resources being traded across the border of the Russian Federation. Following on from this, in March 2008, WWF/TRAFFIC and the VB RCA signed a joint action plan for implementation of the agreement for the period 2008 to 2010. The plan includes the development and printing of training materials for students at VB RCA; providing technical guidance and support to the Educational Centre for Wildlife Protection in the VB RCA; conducting training seminars for frontline staff of enforcement agencies and provincial level Customs officers controlling the Sino-Russian border; and, training relevant agencies in the identification of wildlife products confiscated by Far Eastern Customs.

This work led, in 2007, to the two biggest seizures of wildlife products ever made by enforcement authorities in the Primorsky Province of the Russian Far East, and resulted in stiff penalties for the violators. Following a six-month investigation, an unprecedented 900 bear paws (of Brown Bear *Ursus arctos* (CITES Appendix I/II) and Asian Black Bear *Ursus thibetanus* (CITES I)) were seized, together with four Amur Tiger skins, more than 60 kg of Tiger *Panthera tigris* (CITES I) bones, and 531 horns of Saiga Antelopes *Saiga tatarica* (CITES II), followed, in two separate incidents, by 29 kg of wild ginseng roots. In both cases, WWF and TRAFFIC experts carried out investigations into the status of the seized specimens and later assisted in the court hearings by estimating the total value of the items. This had a bearing on the final court decisions in May 2008 in, respectively, Primorsky Regional Court and the Pogradichny District Court of Primorsky Province. All six persons involved in the bear paw operation were found guilty and sentenced, the two most active members to eight years' imprisonment and a fine of 200 000 rubles (circa USD8500); two Chinese accomplices to 7.6 years' imprisonment each; and the two Russian parties to four years and six months' in gaol (see *TRAFFIC Bulletin* 22(1):33).

The seizure of the 29 kg of wild ginseng in 2007 (3142 roots, in two separate incidents), which had been bound for China, is also worth noting. The first seizure, of 19 kg, occurred in Khankaisky district of Primorsky Province in August; the second in Pogradichny district of Primorsky Province in October. As investigation into the two cases progressed, it became clear that the same people were involved: ex-police officer Vladimir D and two individuals—Mikhail L and Alexander L—who had been responsible for transporting the plants. The judicial investigation took six months and, on 15 May 2008, Vladimir D was gaoled for four years; his accomplice, Mikhail L, was given three years of conditional imprisonment (under supervised release with the prospect of imprisonment for three years in the case of further violations); Alexander L was sentenced to two years of conditional imprisonment.

These court decisions demonstrate how determined the government is in its efforts to combat illegal trade in wildlife products and should set a strong precedent to others.

New challenges

It is no secret that there are well established smuggling routes across the Russian border with China and to Asia-Pacific countries. Groups specializing in illegal fishing, processing and export of different kinds of raw biological materials, and products containing derivatives of wild animals and plants, have also surfaced in the region.

Following the reinvigoration of enforcement by the Far Eastern Customs and other such agencies in the region, smuggling gangs have transformed their methods of operation and trade has become more covert. Those involved are more careful in their communications and it

has also become more difficult for the authorities to glean intelligence via interviews. This has called for a new approach to control and enforcement along the Sino-Russian border which, it is hoped, will lead to closer co-operation and collaboration with Chinese counterparts, including enforcement agencies and NGOs. Keeping in mind that collaboration between enforcement agencies takes time to establish and can often lack co-ordination, TRAFFIC's role in providing information to parties can help in bridging any gaps in communication during this formative period.

The first steps in this respect have already been undertaken. TRAFFIC offices in Russia and China conducted collaborative surveys of wildlife markets in the region along both sides of the Russian and Chinese borders. This provided an opportunity to obtain a better picture of wildlife trade in the Far Eastern region, as well as to share knowledge about the species and products being traded, routes, traders, etc. Preliminary results show that most illegal wildlife trade in Primorsky Province is covert. The survey also found demand for traditional Chinese medicine (TCM) products in Chinese markets within Primorsky Province. Practically all Russian and Chinese traders interviewed were aware that wildlife trade without a special licence was illegal and that trade in endangered species is prohibited in Russia. On the Chinese side of the border, the survey revealed a high level of illegal wildlife products being sold openly to the public, indicating a lower level of law enforcement of wildlife trade in China than in the Russian areas surveyed.

Another challenge is the change in techniques used by smugglers alerted by the authorities' crackdown in detecting concealed items and the imprisonment of smugglers. For example, a new trend for smuggling derivatives revealed by operative Customs officers and WWF/TRAFFIC experts is the illegal transportation of small pieces of Tiger bone across the border in the pocket of a garment. However, the creation of a specialized service of sniffer (detecting) dogs would appear to be an effective solution to this problem.

In the 1990s, following the collapse of the former USSR and the difficult period which followed establishing a new Russian state, the role of NGOs, including TRAFFIC, was, and continues to be important. Sometimes NGOs have had to stand in for agencies that have not had the resources to tackle the problem. During that period of political and financial instability, TRAFFIC's role in assisting the collection of information and in data analysis, as well as in the generation of new ideas for improving CITES implementation and halting the illegal trade in wild animals and plants, has been crucial.

Sergey N. Lyapustin Russian Far Eastern Customs
Alexey L. Vaisman TRAFFIC Europe-Russian Federation
Pavel V. Fomenko WWF-Russia-Russian Federation
Natalia V. Pervushina TRAFFIC Europe-Russian Federation

Development of ASEAN Wildlife Forensics Project

TRACE WILDLIFE FORENSICS NETWORK (WFN) has recently been awarded a grant of UKP205 750 (USD330 680) by the Darwin Initiative to carry out a project to help develop the ability of ASEAN (Association of Southeast Asian Nations) countries to undertake co-ordinated wildlife forensic analysis for CITES enforcement operations and so deter further wildlife crime in the ASEAN region.



The Darwin Initiative assists countries that are rich in biodiversity but poor in financial resources to meet their objectives under one or more of the three major biodiversity Conventions: the Convention on Biological Diversity (CBD); the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); and the Convention on the Conservation of Migratory Species of Wild Animals (CMS), through the funding of collaborative projects which draw on UK expertise on biodiversity. The Darwin Initiative is funded by the UK's Department for Environment, Food and Rural Affairs (Defra).

TRACE WFN provides a platform for delivery and exchange of information for wildlife forensic practitioners and enforcers around the world, with the aim of reducing illegal trafficking of fauna and flora through the co-ordinated application of scientific techniques in support of wildlife crime investigation. TRACE WFN and TRAFFIC have been working in partnership since 2007.

The illegal trade in wildlife is one of the greatest threats to biodiversity in the South-east Asian region and is in direct contravention to CITES. ASEAN member States have demonstrated their commitment to both national wildlife conservation and implementation of CITES through the establishment of the ASEAN Wildlife Enforcement Network (ASEAN-WEN), however practical enforcement of wildlife trade legislation is seriously hampered by a lack of experience and capacity in wildlife crime investigation. Despite improvements in enforcement efforts in recent years, gathering evidence for successful prosecutions remains problematic. One key issue is the accurate, robust identification of illegally traded animal and plant parts, derivatives, or trace evidence.



Forensic analysis is now an established wildlife law enforcement tool in the UK for the identification of CITES-controlled products. The opportunity exists to transfer relevant expertise to the ASEAN region where its need is arguably much greater. While analytical techniques and equipment used in wildlife forensics already exist in a number of ASEAN countries, there is a need for these to be supplemented through additional research and implemented within a co-ordinated forensic framework, to ensure their successful application to CITES enforcement. Specific requests for assistance in this area have been received from government authorities in Malaysia and Thailand and the need for practical enforcement techniques is explicitly highlighted as a priority in the ASEAN-WEN Strategic Plan of Action (2007–2012).

This Darwin Initiative project aims to develop capacity for wildlife forensic investigations within ASEAN countries and foster collaborative CITES enforcement amongst them. In doing so, it will improve the ability of ASEAN nations to enforce CITES. These goals will be met through the implementation of a series of capacity-building, training and research measures, undertaken to support the long-term ASEAN-WEN commitment to the development of wildlife law enforcement in the region.

Three species groups have already been selected as immediate priorities—pangolins *Manis*, turtles and tortoises, and Ramin *Gonystylus bancanus* timber.

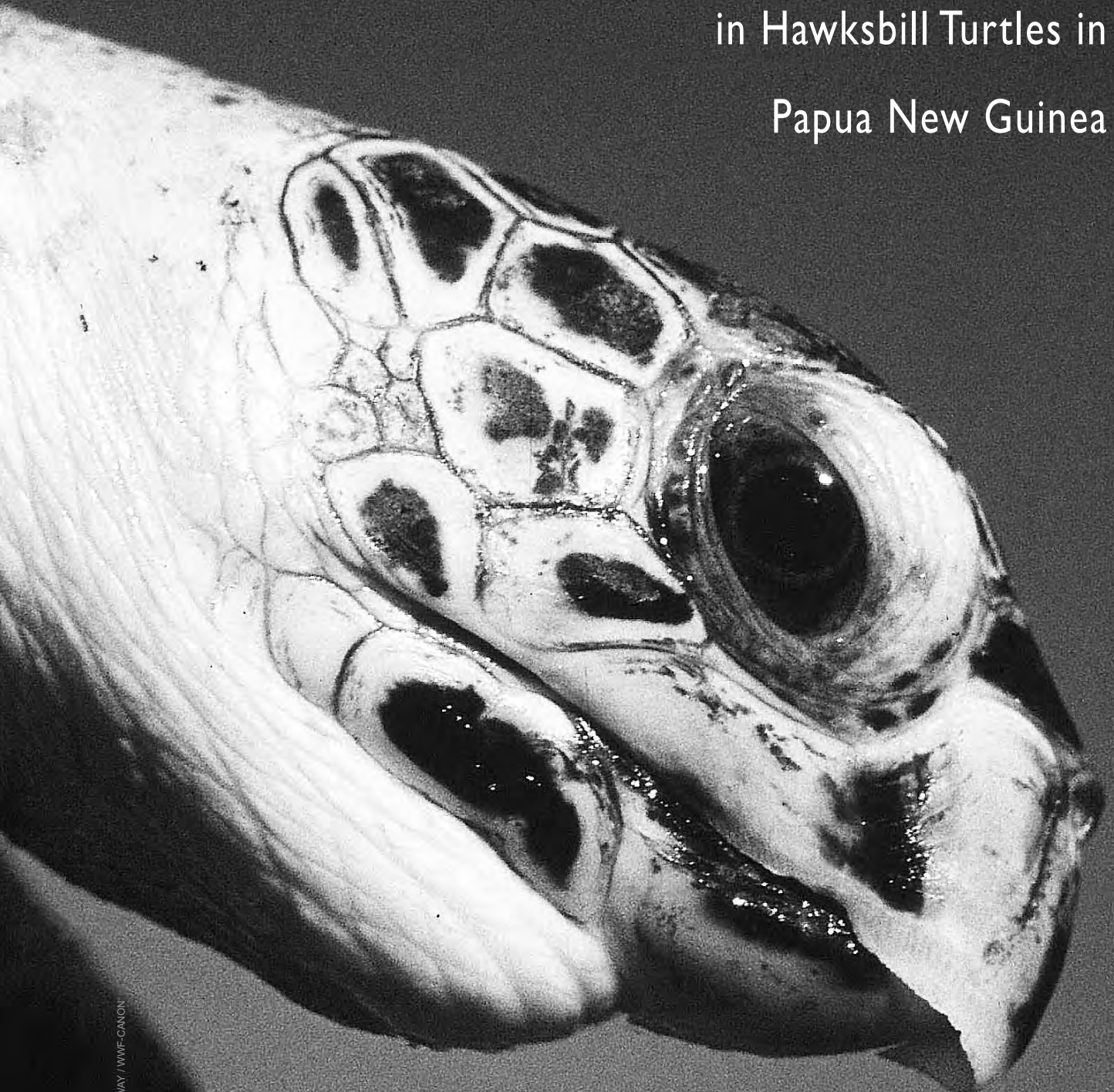
This project will deliver a package of measures that, taken together, will enable individual countries to employ forensic analysis in wildlife crime investigations; an ability that is currently non-existent or severely limited. Field officers will understand the potential and requirements for collecting evidence, laboratories will have the capacity to develop and apply forensic techniques and enforcement officers will be able to plan and implement investigations more effectively. This will have a direct effect on the success of CITES enforcement activity and, crucially, act as a deterrent to criminals who currently run little risk of prosecution. The establishment of a regional network of forensic scientists who are able to exchange methods, data and reference samples among countries, will change the way wildlife forensic issues are addressed. As a whole, the project will build belief within the ASEAN region that the current catastrophic levels of biodiversity loss through illegal exploitation can be tackled.

This TRACE WFN project has a number of partners, including the Royal Zoological Society of Scotland, TRAFFIC International and Bangor University as UK partners, and the ASEAN Wildlife Enforcement Network (ASEAN-WEN) and TRAFFIC Southeast Asia as host country partners.

Dr Ross McEwing Programme Director, TRACE (WFN)
Stephanie Pendry Programme Director, TRACE (WFN) and
 TRAFFIC's Enforcement Programme Leader

Further details from:
ross.mcewing@tracenet.org; www.tracenet.org

An Assessment of the Trade
in Hawksbill Turtles in
Papua New Guinea



Jeff Kinch and Elizabeth A. Burgess

HAWKSBILL TURTLE *ERETMOCHELYS IMBRICATA* CAT HOLLOWAY / WWF-CANON

The trade in Hawksbill Turtles *Eretmochelys imbricata*, medium-sized cheloniids with a pan-tropical distribution, has been recognized as a key threat to their conservation in the wild, and has greatly contributed to the species being listed as Critically Endangered in the IUCN Red List (Milliken and Tokunaga, 1987; Groombridge and Luxmoore, 1989; Meylan and Donnelly, 1999; van Dijk and Shepherd, 2004; TRAFFIC Southeast Asia-Indochina, 2004; Bräutigam and Eckert, 2006; Mortimer and Donnelly, 2007; IUCN, 2009). Sought after for its thick keratinous shell plates (often referred to as *bekko* or tortoiseshell), eggs, and sometimes meat, unsustainable harvest levels have endangered the Hawksbill Turtle throughout its distribution. Declines in populations in the Pacific have been widely reported (Hirth, 1971; Witzell and Banner, 1980; Pritchard, 1982; Balazs, 1983; Witzell, 1983; Johannes, 1986; Groombridge and Luxmoore, 1989; Miller, 1994; NMFS and USFWS, 1998; Meylan and Donnelly, 1999; Mortimer and Donnelly, 2007). Hawksbill Turtles and their eggs are widely used in Papua New Guinea for a variety of purposes, including subsistence, sale, barter (Spring, 1980, 1981, 1982a,b,c; Pernetta and Hill, 1981; Wright and Richards, 1983; Kinch, 1999, 2002, 2003a; Koczberski et al., 2006) and for celebrations at Christmas and the end of the school year, which coincide with the peak turtle nesting period in the austral summer months (Kwan, 1994; Kinch, 1999, 2002, 2003a). In many areas of Papua New Guinea, Hawksbill Turtles are also opportunistically taken as 'by-catch' by fishers out on the reefs targeting lobsters, shellfish and sea cucumbers (Kinch, 1999; Kinch et al., 2007).

BACKGROUND

Tortoiseshell has long been used by the coastal and island villagers in Papua New Guinea for a variety of utilitarian, decorative and ceremonial purposes (Table 1). However, Pritchard (1979) and Spring (1981) reported that the use of tortoiseshell and Hawksbill Turtle carapaces in ceremonies has generally been abandoned. In the Trobriand Islands in Milne Bay Province, young girls have their ears pierced as babies and tortoiseshell earrings are inserted and continue to be added as the girl grows, resulting in large extended ear-lobes (J. Kinch, pers. obs.). Tortoiseshell lime sticks or spatulas (usually an ornately carved piece of scute) are used to transfer lime powder (made from coral, freshwater or marine shells) to the mouth when chewing the mildly narcotic betel nut *Areca catechu* (Boucher and Mannan, 2002; Strickland, 2002), and are popular amongst men in the Milne Bay Province (Kinch, 1999, 2001).

Historical trade in tortoiseshell

A market for tortoiseshell derived from the carapace and marginal scutes of Hawksbill Turtles has existed for centuries. Tortoiseshell became a valuable trade commodity between indigenous inhabitants and European traders, consequently playing a significant role in

changing the cultural and economic fabric of coastal and island inhabitants in the Pacific. For example, during the expedition of *HMS Rattlesnake* in 1848, Huxley (1936) recorded that people brought yams, coconuts and tortoiseshell to his vessel anchored at Piron Island, Milne Bay Province, to trade for iron. During the later British and Australian colonial era, foreign traders regularly hired villagers to harvest Hawksbill Turtles on nesting islands within their waters in order to supply the lucrative tortoiseshell trade (Kinch, 1999, 2002, 2003a).

Eley (1988) reported that the Kiwai peoples of the Western Province, which borders the Australian islands of the Torres Strait, did not have a history of working or trading tortoiseshell, unlike their kin across the border in the Torres Strait (Limpus and Parmenter, 1986, 1988). However, Kiwai men who were employed in the Torres Strait crayfish fishery did learn to carve tortoiseshell, and upon returning to their home villages, began harvesting Hawksbill Turtles to obtain tortoiseshell. Kiwai tortoiseshell products or the scutes were then traded or sold to Torres Strait Islanders (either as a business transaction or through traditional trade or kin relationships), who sold the items to companies in Cairns, who in turn sold them on the local market or shipped them to Japan. Eley (1988) also reported unsuccessful attempts by Kiwai villagers to ranch juvenile Hawksbill Turtles to grow out for later culling, by tethering juvenile Hawksbill Turtles that had been caught on the reefs to stakes on the mudflat adjoining the village.

In other parts of Papua New Guinea, Pritchard (1979) and Spring (1981) note that scutes were often kept by coastal and island villagers for sale to Japanese and European traders but that this trade had declined significantly in more remote regional areas and villages when Papua New Guinea became a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1976. However, despite being a party to CITES, the trade continued around the capital, Port Moresby (Pritchard, 1979; Hirth and Rohovit, 1992).

Previous market surveys

During the 1970s and 1980s, several market surveys were conducted in Papua New Guinea to determine the levels of trade in Hawksbill Turtles. Between February 1979 and December 1981, daily surveys at Koki Market in Port Moresby recorded a total of 154 Hawksbill Turtles for sale (unpublished data, cited in Meylan and Donnelly, 1999). Hirth and Rohovit (1992) monitored several markets, hotels and supermarkets in Port Moresby for tortoiseshell products over 36 days from February 1989 to January 1990. No Hawksbill Turtle meat or shell were observed for sale during this survey at Koki Market, though regular inspection at Boroko Market saw on average one to six women vendors selling tortoiseshell earrings, bracelets and combs. Unworked scutes and juvenile carapaces (unworked and polished) were also observed on rare occasions. At this time, the turnover in tortoiseshell products was not considered high (Hirth and Rohovit, 1992).

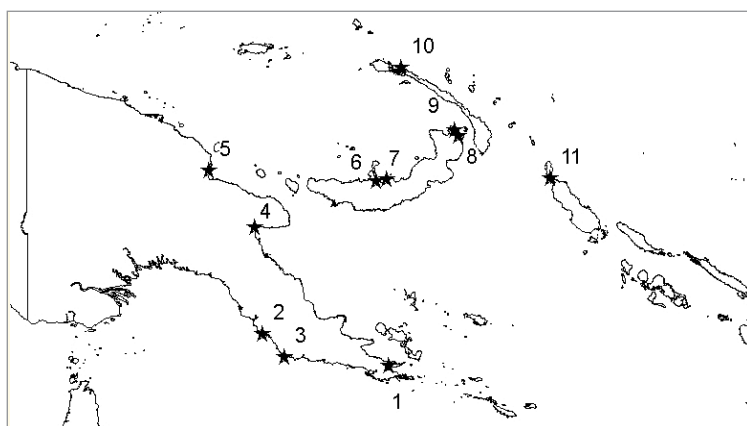


Figure 1.

Map of the survey locations in Papua New Guinea.

1. Alotau, Milne Bay Province; 2. Port Moresby, National Capital District; 3. Hula Village, Central Province; 4. Lae, Morobe Province; 5. Madang, Madang Province; 6. Kimbe, West New Britain Province; 7. Hoskins, West New Britain Province; 8. Kokopo, East New Britain Province; 9. Rabaul, East New Britain Province; 10. Kavieng, New Ireland Province; and 11. Buka, Autonomous Region of Bougainville.

Kwan (1991) estimated that from 1985 to 1987, Hawksbill Turtles accounted for two to five percent of the catch in the turtle meat fishery in Daru, Western Province. During a longer-term survey in the New Ireland Province during the early 1980s, less than five percent of all marine turtles harvested for sale were Hawksbill Turtles (Wright and Richards, 1983).

More recent studies have shown that the level of take can be high in some areas. For example, in the islands of the Calvados Chain, Milne Bay Province, a survey conducted from September 1998 to April 1999 reported 50 Hawksbill Turtles (14 of which were traded to other islands), and eggs from 196 nests were harvested from islands in the territorial waters claimed by Brooker Islanders in the Louisiade Archipelago (Kinch, 1999, 2002, 2003a). Recent socio-economic assessments and marine resource reviews conducted for New Ireland, Morobe and Milne Bay Provinces over 12-month periods, reported that marine turtles were harvested by coastal and island villagers (National Fisheries Authority, 2005, 2006,

2007a,b,c), with stuffed juvenile Hawksbill Turtles occasionally observed for sale in Kavieng market in New Ireland Province (National Fisheries Authority, 2007b). In Milne Bay Province, between two and eight live juvenile Hawksbill Turtles were regularly cited on sale in the Alotau town market, with additional turtle carcasses also for sale (Kinch, 2003b). Koczberski *et al.* (2006) report that the decline in marine turtle abundance in West New Britain Province is linked to the sale of turtle meat and eggs to immigrant workers on the local oil palm estates.

CURRENT ASSESSMENT

Methods

Between May and August 2007, the lead author conducted surveys of retail outlets in nine regional centres across eight provinces in Papua New Guinea (Figure 1).

Province	Use	Reference
Central	Necklaces for bride price, earrings and ceremonial belts	Seligman, 1910; Pritchard, 1979
East New Britain	Needles for tattooing young girls	Pritchard, 1979
East Sepik	Fish-hooks	Pritchard, 1979
Gulf	Fish-hooks	Turner, 1878
Madang	Carved shell for bride price	Pritchard, 1979
Manus	Ceremonial belts, rings, earrings, bracelets, headbands, spoons, combs and fish-hooks, and as a musical complement (scattered on the ground like a deck of cards to produce sound)	Pritchard, 1979; Spring, 1981
Milne Bay	Earrings, rings, lime sticks (used to transfer lime to the mouth when chewing betel nut), combs, sewing needles and as garden magic (ground up with egg shells and mixed with soil when planting yams)	Edge-Partington, 1890–1898; Pritchard, 1979; Kinch, 1999, 2002, 2003a
Morobe	Fish-hooks	Kinch, pers. obs.
New Ireland	Jewellery	Pritchard, 1979
Torres Strait	Fish-hooks, scrapers, in-lay on shell, masks and combs	Edge-Partington, 1890–1898
West New Britain	Carved shell for bride price	Pritchard, 1979

Table 1. Tortoiseshell use in Papua New Guinea and the Torres Strait.

The aim was to gain a contemporary overview of the country's trade in marine turtles and marine turtle products. Information such as volumes of trade, number of traders, trade dynamics, possible sources of marine turtles, species involved in the trade, trade routes, and end destinations was gathered through informal and semi-structured interviews with market sellers, artefact retailers, hotel staff and discussions with members of the public.

Various government agencies, conservation non-governmental organizations and local universities were also consulted. Data from the UNEP-WCMC CITES trade database on Hawksbill Turtle trade from 1950 to 2006 were analysed and compared across the Oceania region.

Prices quoted were in Papua New Guinea Kina (PGK), though all prices quoted in this report have been converted into USD; in May 2007, the exchange rate was PGK0.33 to one US dollar.

National legislation

Currently, of the six turtle species found in Papua New Guinea, the Leatherback *Dermachelys coriacea* is protected under government legislation (Kula and George, 1996). The *Flora and Fauna Protection and Control Act* (1966) stipulates that any person who knowingly buys, sells, offers or consigns for sale, or is in possession or in control of a protected animal is liable to a fine of PGK500 (USD165).

This Act also provides for the establishment of Wildlife Management Areas (WMAs). WMAs provide a mechanism for the local control of fauna on land and in waters held under customary ownership. To date, WMAs have been the most used form of area-based conservation in Papua New Guinea, and can act as sanctuaries for the protection of endangered species depending on the rules developed for resource owners' specific needs. The establishment of a WMA requires the demarcation of social and spatial boundaries to be recognized in consultation with the Department of Environment and Conservation (DEC) and Local Level Government (LLG), and the formation of a Wildlife Management Committee by ministerial appointment, which draws up a schedule of rules and penalties.

In Papua New Guinea, most nesting beaches and marine habitats are owned by a large number of clan and sub-clan groups whose tenure rights are recognized in the National Constitution. Only the open seas, mineral resources, previously alienated land and protected fauna are vested in the State. Subsequently, any plans for the sustainable use or conservation of Hawksbill Turtles in Papua New Guinea will require innovative methods that recognize community rights to sea turtle resources and habitats, while attempting to conserve (and 'recover') the species. Thus, there is a need to adopt an approach that strengthens local conservation practices on one hand, but also strengthens or develops appropriate legislative and policy frameworks.

Other legislation in Papua New Guinea that could also be applicable for Hawksbill Turtle conservation and sustainable management include:

- *Customs (Prohibited Exports) Regulation* (1963) regulates the export of flora and fauna from fishing, pastoral, agricultural and forestry industries;
- *Land Groups Incorporation Act* (1974) allows for the formal recognition of social groups over their territory and natural resources;
- *Conservation Areas Act* (1978), like the *Flora and Fauna Protection and Control Act* (1966), allows for a variety of protective regimes on land and waters under customary tenure;
- *Firearms Act* (1978) restricts the use of weapons and explosives;
- *International Trade (Fauna and Flora) Act* (1979) regulates and restricts the export of CITES species;
- *International Trade (Fauna and Flora) (Fauna) Regulation* (1982) prescribes the documentation required to trade in CITES-listed fauna, to and from Papua New Guinea;
- *Village Courts Act* (1989) lists the 'prescribed offences' which can be dealt with in village courts;
- *Organic Law on Provincial Governments and Local-level Governments* (1997) regulates the respective rights and obligations of the various levels of government in the field of resource management; allows for the development of Ward or Local Level legislation under Sections 42 and 44, which could be used to draw up local-level conservation laws that could potentially ban Hawksbill Turtle and egg take, and establish nesting beach closures;
- *Fisheries Management Act* (1998) provides the framework for policy and decision to promote the management and sustainable development of fisheries;
- *Fisheries Management Regulation* (2000) sets out the procedures, fees and conditions for the licensing of vessels and establishments. The conditions include a requirement for licensed export vessels or establishments to operate in accordance both with Papua New Guinean law and the requirements of importing countries.

International Conventions

Papua New Guinea has been a Party to CITES since 1976. Atlantic Hawksbill Turtle populations were included in CITES Appendix I in 1975 and Pacific populations in Appendix II. In 1977, Pacific Hawksbill Turtle populations were also included in Appendix I.

Since the Hawksbill Turtle is listed in CITES Appendix I, the international trade in tortoiseshell products from Papua New Guinea is generally prohibited. Under strict regulations, CITES allows non-commercial trade in Appendix I species only in exceptional circumstances, such as for scientific or zoological purposes, if such trade will not jeopardize their chances for survival. For such non-commercial trade to occur in accordance with CITES, a valid import permit and a valid export permit or re-export certificate are required. Therefore, if a person wishes to take any tortoiseshell product(s) out of Papua New Guinea, an export permit should be obtained from DEC.

DEC in Papua New Guinea is responsible for the national control of the legal international trade in CITES-listed species, and the application of all measures to stop any illegal international trade of these species. The *International Trade (Fauna and Flora) Act* (1979) implements Papua New Guinea's obligations as a Party to CITES by controlling and regulating the trade, possession, transport, exportation and importation of certain fauna and flora. The *International Trade (Fauna and Flora) (Fauna) Regulation* (1982) prescribes the forms and permits to import, export or re-export fauna listed in CITES Appendix I, II or III, to and from Papua New Guinea.

Item	Quantity	Price range (USD)	Price mean (USD)	Total value (USD)
Hawksbill (tortoiseshell) products	1436	0.33–165.00	8.20	11696.81
Hawksbill Turtle carapace mask	1	49.50	49.50	49.50
Green Turtle carapace	4	8.25–66.00	31.35	125.40
Olive Ridley Turtle carapace	1	16.50	16.50	16.50
Freshwater turtle carapace	8	1.65–6.60	5.98	47.84
Freshwater turtle carapace mask	3	13.20	13.20	39.60
Total	1453			11 975.70

Table 2. Summary of turtle products observed on sale in Papua New Guinea, 2007.

Note: Prices quoted were in Papua New Guinea Kina (PGK), though all prices quoted in this report have been converted into USD; in May 2007, the exchange rate was PGK0.33 to one US dollar.

Unfortunately, CITES regulations appear to be minimally promoted or policed at present by DEC, as is evident by the sales of tortoiseshell items in duty-free shops at Jackson's International Airport. All direct flights from Papua New Guinea are to countries party to CITES: Australia has been a Party since 1976, China since 1981, Japan since 1980, Philippines since 1981, Singapore since 1987, and Solomon Islands since 2007.

While CITES addresses international trade in endangered species, the *Convention on Migratory Species of Wild Animals* (CMS, or Bonn Convention) attempts to address problems of endangered species at a national level, and encourages international co-operation to achieve conservation objectives (Hykle, 2000). Marine turtles follow a migratory life history, and therefore they travel between national territorial waters. CMS is an inter-governmental treaty, administered under the United Nations Environment Programme, and is concerned with the conservation of migratory species of wildlife and habitats on a global scale. The Hawksbill Turtle is listed in Appendix I and II of CMS. CMS Parties strive to protect these animals, conserve or restore habitats and control factors that might endanger them. Papua New Guinea is not currently a Party to CMS. The *Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia* (IOSEA MoU) was created to provide a wider regional agreement which applies to the coastal States of the Indian Ocean and South-East Asia and adjacent seas, extending eastwards towards the Torres Strait. Papua New Guinea has been highlighted as a range State for this agreement, but is currently not a signatory to the IOSEA MoU.

Of the numerous formal global instruments and regional agreements that provide a legal framework for the conservation and management of Hawksbill Turtles in the New Guinea region, Papua New Guinea is signatory to:

- *Convention on Conservation of Nature in the South Pacific* (1976), which establishes a broad framework for nature conservation in the South Pacific region, particularly in relation to migratory and endangered species or the preservation and management of wildlife habitat and terrestrial ecosystems;

- *United Nations Convention on the Law of the Sea* (1982) (entered into force 1994), which established the Economic Exclusion Zones and areas of jurisdiction in the oceans, and developed general rules for fishery conservation and management;
- *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* (1986), which also created a regional approach to the sea turtle protection, the South Pacific Regional Marine Turtle Conservation Project;
- *Convention on Biological Diversity* (1992), an international treaty which has an objective to develop national strategies for the conservation and sustainable use of biological diversity;
- *The Ramsar Convention on Wetlands* (1971) (entered into force 1993), an international treaty for the conservation and sustainable utilization of wetlands;
- *The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks* (1995), which incorporates the precautionary approach to the management of pelagic fisheries.

In 2002, the World Summit on Sustainable Development called for governments, inter-governmental organizations and NGOs to develop partnerships to implement on-the-ground conservation and sustainable development actions for species and ecosystems in danger of extinction. Currently, WWF has an ecoregional programme in Bismarck-Solomon Seas Eco-region which has developed a non-legally-binding, tri-national partnership Memorandum of Understanding (MoU) with government representatives from Indonesia, Papua New Guinea and Solomon Islands, and partners for the recovery of Leatherback Turtles (Kinch, 2006). This MoU has been devised to explore ways that governments, institutions and communities can effectively manage and conserve nesting sites, feeding areas and migratory routes in and across these three countries. The MoU also attempts to address issues such as take, technical capacity, and developing sustainable livelihood options through a network of communities and partnering of conservation NGOs, science and fisheries institutions (Wilson *et al.*, 2006). A similar type of agreement should also be developed for Hawksbill Turtles that share boundaries across countries in the Western Pacific Region (encompassing north-eastern Australia, New Guinea, Solomon Islands, Vanuatu, Fiji and New Caledonia in the south-western Pacific Ocean).

RESULTS AND DISCUSSION

The tortoiseshell trade in Papua New Guinea is centred on the manufacture of jewellery and motifs (decorative designs or patterns, such as Chinese dragons or bird-of-paradise) for domestic sale particularly targeting the international tourist market. Across the eight provinces surveyed, 59 retailers were visited with 32 observed selling marine turtle products. During this survey, all craftsmen interviewed—with the exception of one artisan family—were also involved in the manufacture of marine shell jewellery and the production of wooden carvings.

A total of 1441 marine turtle and 12 freshwater turtle products was observed for sale in retail outlets during this study (Table 2); the trade in marine turtles comprised three species: Hawksbill, Green and Olive Ridley. Ornamental carapaces of Green (n=4) and Olive Ridley Turtles (n=1) were seen for sale in Madang and Morobe Provinces. However, it was the sale of Hawksbill Turtles that constituted 98.8% of the trade in marine turtles recorded across Papua New Guinea. This trade included 1436 tortoiseshell items, comprising 14 different products (Tables 3 and 4). All of these were counted separately (except for earrings which were counted as pairs). The majority were jewellery items (94.2%), particularly earrings (50.6%) and bangles (22.5%). Jewellery prices varied greatly depending on the craftsmanship and tortoiseshell quality (USD0.33–165.00). Some jewellery pieces, such as rings, were more elaborate and combined tortoiseshell set in silver and/or with the addition of pearls in the design (USD21.45–165.00).

Port Moresby, National Capital District

Port Moresby, the nation's capital, was observed to be the main site of sale for Hawksbill Turtle products, contributing to 76.8% of the trade recorded during this survey. Of the sixteen retailers surveyed in the city, 12 were found to be selling Hawksbill Turtle products. Most of the trade (29.4%) was observed in Ela Beach market (which takes place on the last Saturday of each month). Five artisans at this market were selling a large variety of tortoiseshell jewellery products (n=369) for between USD3.30 and USD14.85. Also on sale at Ela Beach market was a selection of ornate tortoiseshell motifs (n=51), crafted from Hawksbill Turtle scutes into various designs of animals, birds and Chinese dragons. Prices for

Item	Port Moresby, National Capital District	Alotau, Milne Bay	Madang, Madang	Lae, Morobe	Kimbe and Hoskins, West New Britain	Kokopo and Rabaul, East New Britain	Kavieng New Ireland	Buka, Bougainville	Total
JEWELLERY									
Bangles	295		3		1	9	15		323
Combs	29								
Earrings	529	72	3	48	10	44	6	15	727
Necklaces	39	3	12	1	24	8	7		94
Pendants	25								25
Hairpins	26					11	6		43
Rings	104			1			7		112
MISCELLANEOUS									
Carving			1						1
Masks			1						1
Motifs	51						1		52
Key-rings	4						3		15
Letter openers	2								2
Fish-hooks			4						7
Guitar picks									5
TOTAL	1104	83	24	58	35	72	45	15	1436

Table 3. Tortoiseshell items observed for sale in Papua New Guinea.



HAWKSBILL TORTOISESHELL BIRD-OF-PARADISE MOTIF



HAWKSBILL TORTOISESHELL JEWELLERY



HAWKSBILL TORTOISESHELL CARVING



SELECTION OF HAWKSBILL TORTOISESHELL MOTIFS



HAWKSBILL CARAPACE AND MASK

PHOTOGRAPHS: J. KINCH

these motifs ranged from USD16.50 for a small animal design, to USD165 for a large Chinese dragon, which was one of the most expensive tortoiseshell products seen during this survey. The bird-of-paradise, a national symbol of Papua New Guinea, featured heavily in the designs of tortoiseshell motifs and jewellery items. Presumably, most of the items for sale at Ela Beach were targeted at the tourist market.

The tortoiseshell jewellery on sale in Port Moresby was sourced mostly from one artisan family based at Hula village, Central Province, approximately 2.5 hours drive to the east of Port Moresby. This family has been making tortoiseshell products for 15 years, and regularly sells tortoiseshell jewellery and other items at Ela Beach Market. They use between nine and 15 Hawksbill Turtles a month. Purchases of tortoiseshell for their handicrafts are by-products of the turtle meat fishery and trade. Hawksbill Turtles are also sourced from two turtle hunters in the village and tortoiseshell scutes are obtained from villagers in Abau to Fishermen Islands for USD9.90 per carapace or bundle of scutes. The family also supplies specialized jewellery to hotel gift shops, duty-free shops at Jackson's International Airport in Port Moresby, as well as taking orders from some supermarkets. They also take orders from departing tourists, often of Asian nationality, who are returning home from Papua New Guinea.

Alotau, Milne Bay Province

Milne Bay Province has a history of traditional tortoiseshell manufacturing for the production of lime sticks and earrings (particularly for Trobriand Island girls). Five retailers were visited, three of which were found to be selling tortoiseshell products. All jewellery items observed on sale in Alotau had been obtained from a travelling trader three years earlier, who had originally sourced the tortoiseshell earrings and necklaces from the artisanal family at Hula village in Central Province.

Madang, Madang Province

Two hotel gift shops were observed to be selling Hawksbill Turtle products. Jewellery items seen on sale there had reportedly been obtained either from a local artisan based in Madang, from a travelling salesman who had sourced them from an artisanal family located at Kombe village in West New Britain Province, or from the Melanesian Arts handicraft shop in Lae, Morobe Province.

Whilst no tortoiseshell jewellery was observed on sale in the local markets, a market in the grounds of a resort offered several freshwater turtles (n=11, 15.5–24.8 cm curved carapace length (CCL), USD1.65–13.20), an Olive Ridley carapace (44.2 cm CCL, USD16.50, on sale for three years) and a Green Turtle carapace (44.2 cm CCL, USD26.40). Two masks made from the carapaces of a juvenile Hawksbill (33.2 cm CCL, USD49.50) and Green Turtle (39.8 cm CCL, USD66) were also observed. These masks were an artistic innovation not previously observed or known to this report's primary author, and were made by applying mud to the outside of the carapace and then painting Sepik mask designs.

Lae, Morobe Province

In Lae, local artisans from Tami Island craft and sell ‘traditional’ fish-hooks from tortoiseshell. Jewellery items observed on sale were obtained from local artisans or travelling traders who had acquired them from other areas, notably from the artisanal family from Hula village in Central Province.

On display, but not for sale, at the Melanesian Arts handicraft shop was a stuffed Hawksbill Turtle (51.4 cm CCL), a juvenile Hawksbill carapace (19.2 cm CCL) and a Green Turtle carapace (44.8 cm CCL). The stuffed Hawksbill Turtle had reportedly been obtained from an Asian man who bought the item but was unsuccessful in taking it out of the country. A handicraft centre had one polished Green Turtle carapace on sale and an assortment of 48 pairs of earrings which were sourced from travelling traders from the artisanal family at Hula village, Central Province, and traders from Madang.

Kimbe and Hoskins, West New Britain Province

The tortoiseshell trade in West New Britain Province was centred around one artisanal family located at Kombe village. The artisan interviewed had been making tortoiseshell jewellery since 2002, and used five to six Hawksbill Turtles a year. Four retail shops in hotel resorts were visited, though no marine turtle products were observed. The local market and stall at the domestic Hoskins Airport were the only retailers dealing in Hawksbill Turtle products. The market seller had 10 sets of assorted earrings and four necklaces displayed for sale, whilst the stall at the airport had 20 assorted necklaces and one bangle for sale.

Kokopo and Rabaul, East New Britain

Eight retail shops in hotel resorts were surveyed in Kokopo and Rabaul, though no Hawksbill products were

observed. Two retailers at the local Kokopo market were selling tortoiseshell jewellery. Local artisans in East New Britain Province consisted of one artisanal family in Kokopo, who make tortoiseshell jewellery to supplement their income. This family sourced tortoiseshell from local fishers who catch Hawksbill Turtles for subsistence. A voluntary community centre which sold artefacts to finance its operational costs, was observed selling pieces of tortoiseshell jewellery. This centre occasionally bought tortoiseshell items from a Sepik man who lived in Rabaul.

Kavieng, New Ireland Province

Artisans in New Ireland Province were located at Nusalik Island, just across from the provincial capital, Kavieng, which also hosts a popular tourist retreat. A family of artisans who sold tortoiseshell items to tourists visiting the island consisted of three women, who used three to four Hawksbill Turtle carapaces annually to craft their jewellery. These turtles were harvested from Tigak Islands by other family members. They also supply jewellery to two hotels and two shops in Kavieng.

A number of Green (39.8–102.9 cm CCL; n=28) and Hawksbill Turtle (34.2–61.8 cm CCL; n=15) carapaces were on display at the resort. These specimens had been supplied by Emriau Marine Products, which had obtained the carapaces from an auction of items that had been confiscated by the National Fisheries Authority. Various other resorts and hotels in the province also sold an assortment of jewellery items (USD5.61–24.75), which were also sourced from artisans from Nusalik Island.

Buka, Autonomous Region of Bougainville

Only one person was found to be selling Hawksbill Turtle products in Buka, capital of the Autonomous Region of Bougainville. This market vendor sources his tortoiseshell jewellery from visiting traders from the

Item	Quantity	Price range (USD)	Price mean (USD)	Total value (USD)
JEWELLERY				
Bangles	323	3.30–165.00	7.97	2574.31
Combs	29	11.55–69.30	15.38	446.02
Earrings	727	0.33–69.30	4.74	3445.98
Necklaces	94	4.13–58.41	8.82	829.08
Pendants	25	3.96–61.05	12.88	322.00
Hairpins	43	6.60–28.05	8.99	386.57
Rings	112	2.31–31.02	7.70	862.40
MISCELLANEOUS				
Carving	1	33.00	33.00	33.00
Masks	1	49.50	49.50	49.50
Motifs	52	16.50–165.00	48.30	2511.60
Key-rings	15	3.96–49.50	12.66	189.90
Letter openers	2	4.95	4.95	9.90
Fish-hooks	7	10.89–17.49	14.85	103.95
Guitar picks	5	3.30	3.30	16.50
TOTAL	1436			11 780.71

Table 4. Prices of tortoiseshell items observed for sale in Papua New Guinea.

Year	Destination	Volume	Item	Purpose
1976	Australia	6	Carcass	Not reported
1977	Australia	9	Carcass	Not reported
1977	Australia	1	Carapace	Not reported
1977	Australia	3	Unspecified	Not reported
1977	USA	1	Unspecified	Not reported
1978	Australia	4	Carcass	Personal
1978	Australia	5	Carapaces	Personal
1978	Australia	3	Leather items	Personal
1978	UK	4	Carapaces	Personal
1978	UK	1	Leather items	Personal
1979	Australia	1	Carcass	Personal
1980	USA	4	Carvings	Not reported
1989	UK	1	Carapaces	Personal
1990	USA	2	Carvings	Not reported
1991	Australia	1	Carapace	Personal
1991	New Zealand	1	Carapace	Personal
1993	UK	1	Carvings	Personal
1993	New Zealand	1	Carapace	Personal
1993	New Zealand	1	Carvings	Personal
1994	Australia	29	Carvings	Commercial
1994	New Zealand	1	Carapace	Commercial
1994	Unknown	7	Carapaces	Commercial
1995	Australia	2	Carvings	Personal
1995	Australia	14	Carvings	Education
1996	Australia	2	Carapaces	Commercial
1996	Netherlands	16	Carvings	Personal
1996	USA	1	Carapace	Not reported
1997	Australia	2	Carapaces	Personal
1998	Philippines	7	Carvings	Personal
1998	USA	17	Carvings	Commercial
2001	Australia	1	Carapace	Personal
2001	Australia	1	Carvings	Personal
2001	Australia	2	Carvings	Personal
2004	Poland	1	Carapace	Not reported

Table 5. Tortoiseshell gross exports from Papua New Guinea, 1976-2004. Source: UNEP-WCMC

Solomon Islands. He usually buys 100 earrings, two to three times a year. The tortoiseshell jewellery on sale was originally manufactured on Malaita, Solomon Islands.

International trade from Papua New Guinea

Statistics on Hawksbill tortoiseshell trade are derived from annual reports filed by CITES member States in fulfillment of their obligations under Article VIII of CITES, which states that each Party shall maintain records of trade in specimens of species included in the CITES Appendices. Since the Pacific Hawksbill Turtle has been listed in at least Appendix II since 1975, all records of international trade in Hawksbill Turtle should have been reported by Papua New Guinea under its obligation as a CITES Party. CITES annual reports recorded no evidence of substantial trade in turtle products directly from Papua New Guinea (Table 5). Between 1976 and 2004, six records document commercial exports of Hawksbill Turtle products, consisting of carapaces and carvings. Most exports of Hawksbill Turtles were to Australia and the USA as personal possessions.

The statistical database of the National Fisheries Authority reports 80 kg of tortoiseshell purchased by fishing companies in the country between 1995 and 1999. Since 1999, there have been no more recorded purchases or reported exports.

Recent surveys by the Japanese Wildlife Conservation Society (2004) amongst traders and artisans across Japan, found no decline in the production or sales of tortoiseshell but surprisingly there was no significant reduction in reported stocks held by traders. This finding suggests that tortoiseshell was potentially being obtained from sources other than the reported stocks, with Singapore appearing to be the gateway for illegal shipments of tortoiseshell (and products) from Indonesia and other Asian countries to Japan (JWCS, 2004). It is possible that tortoiseshell is being taken out of Papua New Guinea illegally, as it is reported that beche-de-mer (dried sea cucumbers) is purchased by Asian nationalities (mostly Malaysians and Chinese) working on logging and fishing vessels (Kinch, 2004; Kinch *et al.*, 2007). It may also be possible that tortoiseshell is being sold in Indonesia's Papua Province (western half of New Guinea island through Vanimo in Papua New Guinea's West Sepik Province to the Indonesian city of Jayapura). This requires further investigation, as East Sepik and West Sepik (also called Sandaun) Provinces were not visited during this assessment.

CONCLUSIONS

The trade in Hawksbill Turtles continues in coastal towns throughout Papua New Guinea. The trade is mainly in the form of tortoiseshell jewellery or motifs, which supply a domestic market and potentially target international tourists as buyers. An increase in tourist purchases could motivate an increase in Hawksbill Turtle harvest to supply tourists with tortoiseshell products, with possible increases in production in the Central, Madang, New Ireland and Milne Bay Provinces. The issue of increased trade in raw scutes is also a possibility for Western and the two Sepik provinces.

In 2007, trade in Hawksbill Turtles was taking place throughout Papua New Guinea although the level of trade appeared to be low with a slow turnover. The nation's capital, Port Moresby, was observed to be the location of sale of the majority of Hawksbill Turtle products during this survey. Dealers and artisans appeared to source Hawksbill Turtles mainly from subsistence or opportunistic catches. However, the level of this take remains unquantified. Furthermore, most of the products observed in Papua New Guinea were manufactured by just a few artisanal families, which then distribute their products in coastal towns across the country.

When compared with the level of trade and supply to Viet Nam (Duc and Broad, 1995; TRAFFIC Southeast Asia-Indochina, 2004; van Dijk and Shepherd, 2004) and some locations in the Caribbean (Bräutigam and Eckert, 2006), the trade in Papua New Guinea is negligible on a global scale. Strengthening national legislation to protect marine turtles, along with increasing the education of buyers, particularly foreign tourists, sellers and relevant

authorities, would contribute greatly to the conservation of marine turtle populations in the Western Pacific Region (encompassing north-eastern Australia, New Guinea, Solomon Islands, Vanuatu, Fiji and New Caledonia in the south-western Pacific Ocean).

RECOMMENDATIONS

Even though the trade in tortoiseshell products in Papua New Guinea is considered minor, management efforts should be strengthened, particularly the roles and responsibilities of DEC, which is the designated authority tasked with managing Papua New Guinea's marine turtle resources. Thus the following recommendations are made to DEC:

- Implement an education and awareness programme in conjunction with the Tourism Promotion Authority and airlines that service Papua New Guinea (national airlines Air Niugini and Airlines PNG, and their respective codeshare partners, QANTAS and Virgin Blue). This could entail the distribution of pamphlets and the placement of signs in gift and artefact shops, local markets and at Jackson's International Airport (and other airports that are planned to open in the future to accept international flights);
- Implement an education and awareness programme for government officers, including Customs officials, as well as general campaigns for the public;
- Seek funding and technical support to implement and enforce CITES regulations effectively;
- Seek funding and technical support to review the status of the Hawksbill Turtle in Papua New Guinea and change its status to a 'Protected Species' under the *Fauna (Protection and Control) Act* (1966) if deemed applicable;
- Increase government participation in regional agreements that provide an operational basis for a unified, science-based and multilateral response to the management, recovery and sustainable use, whether extractive or non-extractive, of marine turtles in the Western Pacific Region;
- Conduct an assessment of the subsistence and semi-commercial take to quantify and characterize marine turtle exploitation at the local, provincial and national level, including trade and marketing patterns, and the importance to livelihoods of the income derived from marine turtle exploitation;
- Provide support for the establishment of marine turtle monitoring programmes that aim to protect nesting and foraging areas, as well as limiting the take of animals and eggs;
- Implement an outreach strategy for the general public, with the aim of increasing awareness and appreciation of marine turtles, turtle conservation and sustainable management.

Finally, since Hawksbill Turtles in Papua New Guinea are known to migrate to neighbouring countries, and in the interests of further understanding the tortoiseshell trade and the general impacts of harvesting, a similar trade assessment in the Solomon Islands, Vanuatu and Fiji should be conducted. Trade should also be investigated in West Papua, Indonesia, to determine any cross-border trade.

ACKNOWLEDGEMENTS

The authors would like to thank the following institutions and staff in Papua New Guinea for their assistance during the assessment: Department of Environment and Conservation, National Fisheries Authority, WWF, The Nature Conservancy (TNC), Conservation International, and Motupore Island Research Centre of the University of Papua New Guinea, Port Moresby, National Capital District; Mahonia na Dari and TNC in Kimbe Bay, West New Britain; WWF and TNC in Madang, Madang Province, and National Fisheries College in Kavieng, New Ireland Province. Provision of financial assistance by The Department of the Environment, Water, Heritage and the Arts in Australia to conduct this survey is also acknowledged.

REFERENCES

- Balazs, G. (1983). Sea turtles and their traditional use in Tokelau. *Atoll Research Bulletin*, No. 279.
- Boucher, B. and Mannan, N. (2002). Metabolic effects of the consumption of *Areca catechu*. *Addiction Biology*. 7:103–110.
- Bräutigam, A. and Eckert, K. (2006). *Turning the Tide: Exploitation, Trade and Management of Marine Turtles in the Lesser Antilles, Central America, Colombia and Venezuela*. TRAFFIC International, Cambridge.
- Dijk, P. van, and Shepherd, C. (2004). *Shelled out? A Snapshot of Bekko Trade in Selected Locations in South-east Asia*. A report prepared for TRAFFIC Southeast Asia, Selangor, Malaysia.
- Duc, L. and Broad, S. (1995). Exploitation of Hawksbill Turtles in Vietnam. *TRAFFIC Bulletin*. 15(2):77–82.
- Edge-Partington, J. (1890–1898). *An Album of the Weapons, Tools, Ornaments, Articles of Dress of the Natives of the Pacific Islands*. 3 Volumes. Holland Press, London.
- Eley, T. (1988). Hunters of the reef: the marine geography of the Kiwai, Papua New Guinea. Unpublished Ph.D. thesis. University of California, Berkeley.
- Groombridge, B. and Luxmoore, R. (1989). *The Green Turtle and Hawksbill (Reptilia: Cheloniidae): World Status, Exploitation, and Trade*. CITES Secretariat, Lausanne, Switzerland.
- Hirth, H. (1971). *South Pacific Islands: Marine Turtle Resources*. Report prepared for the Food and Agriculture Organisation, Rome, Italy.
- Hirth, H. and Rohovit, D. (1992). Marketing patterns of Green and Hawksbill Turtles in Port Moresby, Papua New Guinea. *ORYX*. 26(1):39–42.
- Hykle, D. (2000). The Convention on Migratory Species and marine turtle conservation. In: Pilcher, N. and Ismail, G. (Eds). *Sea Turtles of the Indo-Pacific: Research, Management and Conservation*. Pp.356–361. ASEAN Academic Press, London.
- Huxley, J. (1936). *T.H. Huxley's Diary of the Voyage of H.M.S. Rattlesnake*. Periodicals Service Co (June 1936).
- IUCN (2009). *2009 IUCN Red List of Threatened Species. Version 2009.1*. www.iucnredlist.org. Downloaded on 4 June 2009.
- JWCS (Japanese Wildlife Conservation Society) (2000). *Hawksbill Trade Revived? Analysis of the Management System of Domestic "bekko" Trade in Japan*. Report prepared for the Japanese Wildlife Conservation Society, Tokyo, Japan.
- JWCS (Japanese Wildlife Conservation Society) (2004). *Summary Report of Migration to Illegal Market: Japanese Market of Hawksbill Turtles in a State of No Control*. Report prepared for the Japanese Wildlife Conservation Society, Tokyo, Japan.
- Johannes, R. (1986). *A Review of Information on the Subsistence Use of Green and Hawksbill Turtles on Islands under United States Jurisdiction in the Western Pacific Ocean*. Administrative Report, SWR-86-2. Report prepared for the National Marine Fisheries Service, Terminal Island, California, USA.
- Kinch, J. (1999). *Economics and Environment in Island Melanesia: A General Overview of Resource Use and Livelihoods on Brooker Island in the Calvados Chain of the Louisiade Archipelago, Milne Bay Province, Papua New Guinea*. Report prepared for Conservation International, Port Moresby, Papua New Guinea.
- Kinch, J. (2001). Social evaluation study for the Milne Bay Community-Based Coastal and Marine Conservation Program. Report to the United Nations Development Program (Papua New Guinea/99/G41), Port Moresby, Papua New Guinea.

- Kinch, J. (2002). *The Development of a Monitoring Program for the Management and Sustainable Use of Sea Turtle Resources in the Milne Bay Province, Papua New Guinea*. A proposal prepared for the South Pacific Regional Environment Program, Apia, Western Samoa.
- Kinch, J. (2003a). *Sea Turtle Resources in the Milne Bay Province, Papua New Guinea: Results of a Nesting Survey (21–27/01/03) at Panayayapona and Panadaludalu Islands (Jomard Islands), with Additional Notes*. Report prepared for the South Pacific Regional Environment Program, Apia, Samoa; the Department of Environment and Conservation, Port Moresby, Papua New Guinea, and Environment Australia, Brisbane, Queensland, Australia.
- Kinch, J. (2003b). *Sea Turtle Resources in the Milne Bay Province, Papua New Guinea: Conservation and Management Issues in Relation to Protection and Sale in Markets*. Report prepared for the Department of Environment and Conservation, Port Moresby, Papua New Guinea.
- Kinch, J. (2004). *A Review of the Beche-de-mer Fishery and its Management in Papua New Guinea*. Report prepared for the National Fisheries Authority, Port Moresby, Papua New Guinea.
- Kinch, J. (2006). *A Socio-economic Assessment of the Huon Coast Leatherback Turtle Nesting Beach Projects (Labu Tale, Busama, Lababia and Paiawa), Morobe Province, Papua New Guinea*. Honolulu: Western Pacific Regional Fisheries Management Council.
- Kinch, J., James, M., Thomas, E., Lauhi, P. and Gabiobu, R. (2007). *Socio-economic Assessment of the Beche-de-mer Fisheries in the Western, Central and Manus Provinces, Papua New Guinea*. Report prepared for the National Fisheries Authority, Port Moresby, Papua New Guinea.
- Koczberski, G., Curry, G., Warku, J., and Kwam, C. (2006). *Village-based Marine Resource Use and Rural Livelihoods: Kimbe Bay, West New Britain, Papua New Guinea*. TNC Pacific Islands Countries Report, No. 5. Report prepared for The Nature Conservancy, Port Moresby, Papua New Guinea.
- Kula, G. and George, I. (1996). *Protected Fauna of Papua New Guinea*. Port Moresby. Department of Environment and Conservation.
- Kwan, D. (1991). The artisanal sea turtle fishery in Daru, Papua New Guinea. In: D. Lawrence and T. Cansfield-Smith. (Eds). *Sustainable Development for Traditional Inhabitants of the Torres Strait Region*. Pp.239–240. Great Barrier Reef Marine Park Authority, Townsville.
- Kwan, D. (1994). Recommendations for the management of the artisanal marine turtle fishery in Daru, Papua New Guinea. In: James, R. (Ed.). *Proceedings of the Australian Marine Turtle Conservation Workshop, Sea World Nara Resort, Gold Coast, 14–17th November, 1990*. The Australian Nature Conservation Agency, Canberra.
- Limpus, C. and Parmenter, C. (1986). The sea turtle resources of the Torres Strait region. In: Haines, A.; Williams, G. and Coates, D. (Eds). *Torres Strait Fisheries Seminar, Port Moresby, 11–14 February 1985*. Pp.95–107. Commonwealth of Australia, Canberra.
- Limpus, C. and Parmenter, C. (1988). The sea turtle resources of the Torres Strait region. In: Gray, F. and Zann, L. (Eds). *Traditional Knowledge of the Marine Environment in Northern Australia: Proceedings of a Workshop held in Townsville, Australia, 29–30th July, 1985*. Pp.149–163. Workshop Series No. 8. Great Barrier Reef Marine Park Authority, Townsville, Australia.
- Meylan, A. and Donnelly, M. (1999). Status justification for listing the Hawksbill Turtle (*Eretmochelys imbricata*) as Critically Endangered on the 1996 IUCN Red List of Threatened Animals. *Chelonian Conservation and Biology: International Journal of Turtle and Tortoise Research* 3(2):200–224.
- Miller, J. (1994). The Hawksbill Turtle, *Eretmochelys imbricata*: a perspective on the species. In: James, R. (comp.). *Proceedings of the Australian Marine Turtle Conservation Workshop*. Pp:25–38. Australian Nature Conservation Agency, Canberra, Australia.
- Milliken, T. and Tokunaga, H. (1987). *The Japanese Sea Turtle Trade, 1970–1986*. Report prepared for TRAFFIC Japan, Tokyo, Japan.
- Mortimer, J. and Donnelly, M. (2007). *IUCN Red List Status Assessment: Hawksbill Turtle (Eretmochelys imbricata)*. IUCN, Gland, Switzerland.
- National Fisheries Authority (2005). *Socio-economic Survey of Small-scale Fisheries in Kavieng Province, Papua New Guinea*. Kavieng: National Fisheries Authority and the Coastal Fisheries Management and Development Project.
- National Fisheries Authority (2006). *Socio-economic Survey of Small-scale Fisheries in Milne Bay Province, Papua New Guinea*. Kavieng: National Fisheries Authority and the Coastal Fisheries Management and Development Project.
- National Fisheries Authority (2007a). *A Review of Fisheries and Marine Resources in Milne Bay Province, Papua New Guinea*. Kavieng: National Fisheries Authority and the Coastal Fisheries Management and Development Project.
- National Fisheries Authority (2007b). *A Review of Fisheries and Marine Resources in New Ireland Province, Papua New Guinea*. Kavieng: National Fisheries Authority and the Coastal Fisheries Management and Development Project.
- National Fisheries Authority (2007c). *Socio-economic Survey of Small-scale Fisheries in Morobe Province, Papua New Guinea*. Kavieng: National Fisheries Authority and the Coastal Fisheries Management and Development Project.
- NMFS and USFWS (National Marine Fisheries Service and US Fish and Wildlife Service) (1998). *Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle (Eretmochelys imbricata)*. Silver Spring: National Marine Fisheries Service.
- Pernetta, J. and Hill, L. (1981). A review of marine resource use in coastal Papua. *Journal de la Société des Océanistes*. 7 (72–73):175–191.
- Pritchard, P. (1979). *Marine Turtles of Papua New Guinea, Unedited Field Notes*. Report prepared for the Papua New Guinea Wildlife Division, Port Moresby, Papua New Guinea.
- Pritchard, P. (1982). Marine turtles of the South Pacific. In: Bjørndal, K. (Ed). *Biology and Conservation of Sea Turtles*. Pp.253–262. Washington, D.C.: Smithsonian Institution Press, Washington, DC.
- Seligman, G. (1910). *The Melanesians of British New Guinea*. Cambridge University Press, Cambridge.
- Spring, C. (1980). *Turtles, Men and Magic*. Report prepared for the Department of Environment and Conservation, Port Moresby, Papua New Guinea.
- Spring, S. (1981). Marine turtles in the Manus Province: A Study of the Social, Cultural and Economic Implications of the Traditional Exploitation of Marine Turtles in the Manus Province of Papua New Guinea. *Journal de la Société des Océanistes*. 72–3(37):169–174.
- Spring, S. (1982a). Status of marine turtle populations in Papua New Guinea. In: Bjørndal, K. (Ed.). *Biology and Conservation of Sea Turtles*. Pp.281–289. Smithsonian Institution Press, Washington, DC.
- Spring, S. (1982b). Subsistence hunting of marine turtles in Papua New Guinea. In: Bjørndal, K. (Ed.). *Biology and Conservation of Sea Turtles*. Pp.291–295. Smithsonian Institution Press, Washington, DC.
- Spring, S. (1982c). Marine turtle conservation in Papua New Guinea. In: Mourata, L., Pernetta, J. and Heaney, W. (Eds). *Traditional Conservation in Papua New Guinea: Implications for Today*. Monograph 16. Institute of Applied Social and Economic Research, Boroko.
- Strickland, S. (2002). Anthropological perspectives on use of the Areca Nut. *Addiction Biology* 7:85–97.
- TRAFFIC Southeast Asia-Indochina (2004). *The Trade in Marine Turtle Products in Viet Nam*. Report prepared for TRAFFIC Southeast Asia-Indochina, Hanoi, Viet Nam.
- Turner, W. (1878). The ethnology of the Motu. *Journal of the Royal Anthropological Institute of Great Britain and Ireland*. 7:470–499.
- Wilson, L., Philip, M., Pita, J., Hitipeuw, C. and McLellan, L. (2006). A tri-national partnership to save the Western Pacific Leatherback Turtle in the Bismarck Solomon Seas eco-region. In: Frick, M., Panagoulou, A., Rees, A. and Williams, K. (comps.). *26th Annual Symposium on Sea Turtle Biology and Conservation, Island of Crete, Greece, 2–8 April 2006: Book of Abstracts*. P.171. International Sea Turtle Society, Athens.
- Witzell, W. (1983). Synopsis of the biological data on the Hawksbill Turtle *Eretmochelys imbricata* (Linnaeus, 1766). *FAO Fisheries Symposium*. 137:1–78.
- Witzell, W. and Banner, A. (1980). The Hawksbill Turtle (*Eretmochelys imbricata*) in Western Samoa. *Bulletin of Marine Science*. 30(3):571–579.
- Wright, A. and Richards, A. (1983). *The Yield from a Papua New Guinea Fishery*. Report prepared for the Department of Primary Industry, Fisheries Division Report, No. 83–87, Port Moresby, Papua New Guinea.

Jeff Kinch Coastal Management Advisor, Secretariat of the Pacific Regional Environment Programme. E-mail: jeffreyk@sprep.org
Elizabeth A. Burgess Consultant to TRAFFIC Oceania, University of Queensland, Australia. E-mail: liz.burgess@traffic.org



THE TRAFFIC BULLETIN SEIZURES AND PROSECUTIONS SECTION IS SPONSORED BY THE FORESTRY BUREAU, COUNCIL OF AGRICULTURE, TAIWAN: COMMITTED TO SUPPORTING CITES ENFORCEMENT

The cases reported below represent a selection of recent seizures and prosecutions that have taken place around the world. The sources of this information are cited at the end of each country section. The CITES Appendix-listing for each species is placed in parentheses, where appropriate.

EUROPE

FRANCE

On 20 January 2009, Customs officials at Viry, Haute-Savoie, stopped a vehicle travelling in the direction of Geneva. Inside the boot they discovered 33 carcasses of smoked animals, including three pythons, three monkeys and 22 porcupines (all reportedly CITES species). The goods originated from Central Africa, had entered the country through Roissy Airport, and were destined for restaurants in France and Switzerland. All items were seized and the case was referred to the Public Prosecutor's office.

On 7 April 2009, some 15 Parisian jewellers appeared before a Magistrates' court accused of having illegally traded in bracelets made from elephant (CITES I) hair between 1998 and 2008. The police were alerted to the sale of the bracelets on the internet auction site e-Bay, where they were directed to the jewellers and a wholesale dealer. During the course of their inquiry, the police seized more than 700 bracelets, and around 100 rings. The outcome of the case was not reported.

Similar cases have taken place in recent months, with another Parisian jeweller receiving a three-month suspended prison sentence and a fine of EUR3000 (USD4000) for selling elephant hair jewellery. In February, another individual appeared at Créteil Magistrates' Court and received a suspended fine of EUR1500.

Tribune de Genève, 13 February 2009; www.tdg.ch:80/genève/actu/saisie-boas-porcs-epics-fumes-2009-02-13; www.google.com/hostednews/afp/article/ALeqM5gfC_z0Sjwk-idohPOENAR0OWtVQ, 7 April 2009

NETHERLANDS

In January 2009, police officers, acting on information received from TRAFFIC, seized 249 veneer sheets of Brazilian Rosewood *Dalbergia nigra* (CITES I) from two companies based in Rotterdam and 's-Gravendeel. Neither company was able to provide documentation to prove the wood had been legally imported or that it had been legally obtained.

"The Rotterdam police are to be congratulated for their vigilance and decisive action against illegal timber imports," commented Rob Parry-Jones, Director of TRAFFIC Europe.

Brazilian Rosewood is used for making musical instruments and furniture, but is threatened by habitat loss. It is endemic to Brazil and is classified as Vulnerable by IUCN.

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)

establishes international controls over trade in wild plants and animals, or related products, of species that have been, or may be, threatened due to excessive commercial exploitation. Parties have their own legislative vehicle by which to meet their obligations under CITES. The species covered by CITES are listed in three Appendices, according to the degree of protection they need:

APPENDIX I includes species threatened with extinction which are or may be threatened by trade.

Trade in specimens of these species is permitted only in exceptional circumstances. An export permit from the country of origin (or a re-export certificate from other exporting countries) and an import permit from the country of importation are required.

APPENDIX II includes species not necessarily yet threatened, but which could become so if trade is not strictly controlled. Species are also included in Appendix II if they are difficult to distinguish from other species in Appendix II, in order to make it more difficult for illegal trade to take place through misidentification or mislabelling. An export permit from the country of origin (or a re-export certificate from other exporting countries) is required, but not an import permit.

APPENDIX III includes species that any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation and as needing the co-operation of other Parties in the control of trade. Imports require a certificate of origin and, if the importation is from the State that has included the species in Appendix III, an export permit is required.

19 February 2009, www.traffic.org/home/2009/2/19/rotterdam-police-score-musical-wood.html; IUCN 2009. 2009 IUCN Red List of Threatened Species. Version 2009.1. www.iucnredlist.org. Downloaded on 4 June 2009.

RUSSIA

On 11 November 2008, traffic police from Milkovo District, Kamchatka, stopped a lorry carrying 38 Gyr Falcons *Falco rusticolus* (CITES I), a species in demand for use in falconry, particularly in the Middle East. Under Russian law, possession of a Gyr Falcon from Kamchatka is illegal. This was the biggest such case recorded in recent years, according to Alexey Vaisman of TRAFFIC Europe's Russia office.

The smugglers claimed to have bought the birds from an unidentified source in the town of Ossora in Karaginsky District in the northern part of Kamchatka. Experts said that collection of such a large number of birds would have taken several months, which indicated a highly organized criminal smuggling operation.



S. ARAMILEV / WWF RUSSIA

THE AMUR LEOPARD SKIN SEIZED BY RUSSIAN POLICE IN PRIMORSKY PROVINCE; NO MORE THAN 20 ADULT AMUR LEOPARDS ARE BELIEVED TO BE IN EXISTENCE.

Enforcement officers and representatives from the Federal Service for Supervision of Natural Resources (Rosprirodnadzor) travelled to Milkovo to carry out further investigations.

Following veterinary inspection, three of the birds were kept for treatment, but the remainder were released.

According to local ornithologists, as many as 100 Gyr Falcons are smuggled from Kamchatka each year and overall numbers in the region have dwindled to 500 pairs.

On 11 January 2009, at Domodedovo International Airport, Moscow, Customs officials seized a parcel containing hides, skulls and horns. The expertise of TRAFFIC Europe-Russia, in collaboration with the Russian CITES Scientific Authority, was called upon to identify the trophies, which were found to consist of two sets (two skulls; two pairs of horns) of Markhor *Capra falconeri* (CITES I), six sets (six hides; six skulls; six pairs of horns) of Argali or Marco Polo Sheep *Ovis ammon polii* (II), and one set (hide, skull and pair of horns) of Ibex *Capra sibirica*.

All trophies had been transported from Tajikistan with fake CITES permits. Hunting of Marco Polo sheep was closed this year by the decision of the President of Tajikistan. Trophy hunting of Markhor is allowed only in Pakistan, and is restricted to six elderly male specimens and under strict international supervision.

On 3 April 2009, police officers inspecting a car in Ussuriisk, in Primorsky Province in the Russian Far East, discovered the skin of an Amur Leopard *Panthera pardus orientalis* (CITES I). Only an estimated 14 to 20 adult Amur Leopards and five or six cubs survive in an area of just 2500 km² in Russia's south-western Primorye region, according to the IUCN Red List, which classifies this subspecies as Critically Endangered. It is extinct in China and the Korean Peninsula.

The skin's identity was confirmed by experts from the Institute of Animal Husbandry and Veterinary Medicine of the Primorsky State Agricultural Academy, experts from Primorsky Province Hunting Department and WWF-Russia. They noted damage to the skin indicating that the animal, probably an adult male, had been shot, most likely in 2008.

Photographs of the skin may help identify the Leopard by comparing it against a database of known surviving Amur Leopards.

TRAFFIC Europe, 12 November 2008; www.wwf.ru/resources/news/article/eng/4475, 15 January 2009; www.traffic.org/home/2009/4/17/amur-leopard-skin-seized-by-russian-police.html, 7 April 2009; Jackson, P. and Nowell, K. 2008. *Panthera pardus ssp. orientalis*. In: IUCN 2009. 2009 IUCN Red List of Threatened Species. Version 2009.1. www.iucnredlist.org. Downloaded on 4 June 2009

SWEDEN

On 5 November 2008, at Varberg district court, nine fishermen were found guilty of illegally fishing more than 100 t of Atlantic Cod *Gadus morhua* in the country's largest-ever poaching case. The species is listed as Vulnerable by IUCN. They were accused of incorrect book-keeping of catches in the spring of 2005 in the Kattegat Strait.

The fishermen were all fined between SEK3740 and 70 000 (EUR375–7016, USD486–9096), and one of them, who was also found guilty of other crimes, was sentenced to five months in prison.

In all, 16 fishermen were charged with catching 109 t of Atlantic Cod and passing it off as unquoted Pollack *Pollachius pollachius* (a member of the cod family), in what appeared to be a ploy to circumvent EU quotas limiting cod fishing.

The court however found that they had not exceeded the permitted quota for 2005, and decided to drop charges against seven fishermen who had not been captains on their ships at the time.

The court also dropped the case against a purchaser of fish who had been accused of facilitating the scam.

According to the Swedish Board of Fisheries, the case is serious since the illegal fishing of this species puts further pressure on dwindling cod stocks in the Kattegat Strait.

Enforcement action against illegal caviar traders in Sweden is paying dividends, with just two tins of illicit caviar discovered by county regulators between 2006 and 2008, and the conviction on 19 December 2008 of two fishmongers and a retailer. At the Court of Uppsala, they were convicted of illegally selling 21 tins of caviar in 2005 and were fined a total of SEK22 200 (USD2500).

The clampdown on illegal caviar in Sweden began in 2005, mainly in Uppsala and Stockholm. In November 2005, the 21 tins of osetra (roe, most commonly from the Persian Sturgeon *Acipenser persicus*), sevruga (from the Stellate Sturgeon *Acipenser stellatus*) and beluga caviar (from Beluga *Huso huso*), were confiscated in Uppsala. In court, it was revealed that the caviar had come from Estonia via Finland, was half the normal price, and lacked appropriate documentation.

In Gothenburg the same month, police confiscated 12 tins of caviar from three different retailers, who were similarly unable to produce the correct documentation. All were subsequently convicted of selling illegal caviar and fined a total of SEK11 400 (USD1300).

The cases attracted high profile media attention, with fish retailers claiming that they were unaware of the legislation. Subsequently, the relevant Swedish trade association contacted its members to inform them about the rules covering the caviar trade.

"Thanks to the authorities and the high profile media coverage, fish retailers and traders in Sweden are all aware of the regulations concerning caviar, and the illegal trade has been reduced significantly," commented Mats Forslund, TRAFFIC Europe's representative based in Sweden.

5 November 2008, <http://afp.google.com/article/ALeqM5hCcdCRIwOEBHJsZ4sElbLP0X71Fg>; IUCN 2009. 2009 IUCN Red List of Threatened Species. Version 2009.1. www.iucnredlist.org. Downloaded on 4 June 2009; TRAFFIC Europe, 3 March 2009; TRAFFIC Bulletin 19(1)

UK

In November 2008, UK Border Agency officers at Dover Ferry Terminal intercepted a British-registered vehicle driven by two Vietnamese individuals and found over 100 kg of meat concealed inside a stereo speaker system and in bags. Further examination by the CITES Team and the removal of samples for DNA testing revealed that the produce was a mixture of Siamese Crocodile *Crocodylus siamensis* (Annex A; CITES I), freshwater turtle, dog and cat meat. Investigations are continuing.

In November 2008, UK Border Agency CITES team officers at Heathrow Airport examined a shipment of tropical fish and seized 86 Banggai Cardinal Fish *Pterapogon kauderni*, a species recently listed on Annex D of the EU regulations and therefore in need of an import notification. Following the seizure, it was discovered that the ornamental fish trade had not been informed of this listing.

In January 2009, UK Border Agency officers at the airport intercepted a Chinese national arriving from Shanghai after a positive reaction from a detection dog of the passenger's baggage. Further examination revealed a cooked bear Ursidae (CITES I/II) paw amongst other food items. Use of dogs specializing in detection of Products of Animal Origin (POAO) has recently provided a large number of CITES-related seizures, including traditional medicines, sea-horses *Hippocampus* (CITES II), ginseng *Panax* (II) and Houbara Bustards *Chlamydotis undulata* (I).

In February 2009, UK Border Agency officers at the airport seized two boxes of unaccompanied baggage containing nine dead Houbara Bustards imported from Morocco. The baggage was unclaimed and all the specimens were confiscated. One of the dead birds was wearing a leg ring indicating it had been bred at a conservation centre in Morocco.



DEAD HOUBARA BUSTARDS IMPORTED FROM MEXICO AND SEIZED AT HEATHROW AIRPORT, UK.

G. CLARKE / UKBA

In March 2009, the UK Border Agency CITES team at the airport seized 26 Royal Pythons *Python regius* (CITES II/Annex B) being imported from the USA without correct import documentation.

In December 2008, UK Border Agency officers at Manchester Airport seized a shipment of live reptiles imported from the USA which were not accompanied by CITES import permits. Forty-four specimens were seized including African Spurred Tortoises *Geochelone sulcata*, Common Iguanas *Iguana iguana*, Royal Python *Python regius* and East African Spiny-tailed Lizards *Cordylus tropidosternum* (all CITES II).

In January 2009, UK Border Agency officers at the airport examined an air cargo shipment of 1000 kg of Hoodia *Hoodia gordonii* (CITES II) powder imported from South Africa. Follow-up checks revealed that a UK CITES import permit had not been issued for the shipment, which was confiscated. Hoodia is a succulent in the Apocynaceae family of flowering plants and is in demand for its purported appetite-suppressant properties.

In December 2008, UK Border Agency officers at Coventry International Parcels Hub detected one complete tusk of African Elephant *Loxodonta africana* (CITES I) in a postal parcel in transit from Lesotho to China. No CITES permits were available and the tusk was seized.

In February 2009, UK Border Agency officers at London Gatwick Airport seized two kilogrammes of unlicensed beluga caviar (roe from Beluga *Huso huso*, CITES II) being imported in baggage accompanied by passengers arriving from Turkey. The caviar tins had no CITES labels. DNA forensic testing of the caviar revealed that it was from the Siberian Sturgeon *Acipenser baerii* (II).

On 14 May 2009, at Shrewsbury Crown Court, David Neville Johnson, of Telford, was gaoled for eight months and became the first person in the UK to be given a three-year Serious Crime Prevention Order (SCPO) for wildlife offences. Johnson was charged with the illegal sale of 191 Hermann's Tortoises *Testudo hermanni* and seven Spur-thighed Tortoises *T. graeca* (both CITES II and EU Annex A, trade in which is subject to the strictest controls), making false statements to obtain permits and the prohibited purchase of 200 Hermann's Tortoises.

The SCPO bans Johnson from possessing any EU Annex A species for three years. The judge also ordered an inquiry under the provisions of the *Proceeds of Crime Act*.

In March 2008, Johnson applied to the UK CITES Management Authority (Animal Health) for permits to sell 100 Hermann's Tortoises. Owing to anomalies in information provided, an AH Wildlife Inspector, accompanied by an officer from NWCU, conducted an inspection at his Telford address in order to examine the specimens that were the subject of the application. As a result of the inspection and anomalies discovered, the application was refused.

In November 2008, following a protracted investigation and based on intelligence which suggested that Johnson had sold tortoises illegally, NWCU officers, AH Wildlife Inspectors and UK Border Agency Officers, supported by officers from West Mercia Police and West Midlands Police, executed search warrants at various addresses associated with Johnson. He was subsequently arrested and a large quantity of documentation was seized.

Whilst on police bail, Johnson bought a further 200 Hermann's Tortoises illegally, which were sold on without valid permits.

UK Border Agency CITES Team; NWCU press release, 15 May 2009

AFRICA

On 15/16 November 2008, dozens of suspected dealers in illegal wildlife products were arrested and one tonne of raw, powdered and processed ivory seized in an operation encompassing five African countries. The raids, which were the culmination of a four-month undercover operation code-named Operation Baba, co-ordinated by INTERPOL and involving the Kenya Wildlife Service (KWS) and the Lusaka Agreement Task Force, targeted local ivory markets, airports and border crossings in Kenya, Republic of the Congo, Ghana, Uganda and Zambia. Fifty seven people were arrested. Also seized were teeth of Hippopotamus *Hippopotamus amphibius* (CITES II) and skins of Cheetah *Acinonyx jubatus* (I), Leopard *Panthera pardus* (I), Serval *Leptailurus serval* (II) and python Pythonidae (I/II).

Some 36 of the suspects were arrested in Kenya, and included three Chinese nationals.

INTERPOL Secretary General Ronald K. Noble said that Operation Baba was the first in a series of such operations being planned worldwide [see also under Indonesia].

The German Government was one of the major funders of the operation.

www.earthtimes.org/articles/show/241972,massive-african-operation-traps-scores-of-illegal-ivory-dealers.html, 17 November 2008; *Africa World News*, 17 November 2008; www.blueridgenow.com/article/20081117/APII811171996

DEMOCRATIC REP. OF THE CONGO

On 26 April 2009, a suspected trafficker was caught and arrested at Goma International Airport while disembarking from a flight from Walikale (in the interior of the country and close to gorilla habitat). In his possession was a young female Eastern Gorilla *Gorilla beringei* (CITES I). The animal was concealed in a bag and was suffering from over-heating and dehydration after having spent over six hours in transit.

The seizure follows a three-month undercover investigation by the Congolese Wildlife Authority (ICCN) to bust an international wildlife smuggling ring in the country. According to Emmanuel de Merode, Director of Virunga National Park, there has been a significant upsurge in the trafficking of baby Gorillas in recent months. Investigations have yet to reveal where these animals are being sent and who is buying them.

<http://liccn.gorilla.cd>

REPUBLIC OF THE CONGO

On 19 March 2009, in Brazzaville, a Congolese national was sentenced to 12 months' imprisonment and fined XAF100 000 (USD145) and ordered to pay a further one million francs to the Ministry of the Forestry Economy. Another suspect fled before he could be brought to court.

The pair was apprehended by the authorities on 20 December 2008 as they prepared to sell a live Chimpanzee *Pan troglodytes* (CITES I and protected in Congo).

www.brazzavilleadiac.com/index.php?action=depeche&de_p_id=28217&oldaction=liste®pay_id=0&them_id=0&cat_id=3&ss_cat_id=54&LISTE_FROM=0&select_month=03&select_year=2009

KENYA

On 23 January 2009, at Makadara law courts, three Chinese men were charged with illegal possession of government trophies following their arrest, in three separate cases the previous day at Jomo Kenyatta Airport, in possession of ivory. All suspects, who were travelling to different destinations in China, were also found with Lion *Panthera leo* (CITES I/II) teeth, ivory bracelets and necklaces.

Kenya Wildlife Service sniffer dogs detected two processed ivory carvings weighing 2.5 kg and one necklace concealed in a bag. The second suspect was arrested by Customs officials in possession of two necklaces, four Lion teeth and four bracelets, while the third was in possession of 380 g of carved ivory.

Two of the suspects were travelling from Kenya, while the third had arrived from Uganda.

On 31 January 2009, a Nairobi businesswoman was arrested with 74 kg of bushmeat at a popular meat-eating market in downtown Nairobi.

On 27 April 2009, at Kajjido court, south of Nairobi, a Kenyan and a Tanzanian pleaded guilty to charges of illegally possessing 512 kg of elephant tusks in what is believed to be the largest seizure of illegal ivory in recent years.

The ivory had been seized from the car the pair was travelling in at Mbirikani on the Mali-Lokitoktok road, some 50 km from the border with Tanzania, on 25 April. The ivory was estimated to have derived from 70 elephants, based on the weight of the tusks seized.

Kenya Wildlife Service, 23 January 2009; http://africasciencenews.org/asns/index.php?option=com_content&task=view&id=973&Itemid=2, 1 February 2009; www.coast-week.com/3218-05.htm

MADAGASCAR

On 9 December 2008, Jo van Niekerk, a zoology student from Pretoria, South Africa, was sentenced to one year in gaol. He was arrested in November at Antananarivo Airport in possession of some 388 animals, including around 100 lizards and frogs that were found in the lining of his jacket. Among the specimens were several species only found on Madagascar, including a fanged snake and the nocturnal leaf-tailed gecko [species not reported]. Van

Niekerk insisted his interest in the animals was for research purposes and that he would be appealing the ruling.

A separate arrest warrant was issued for an alleged accomplice who was reported to be on the run. All the recovered animals are now at Antananarivo's main zoo. It is not clear whether they will be returned to their natural habitat.

Associated Press, 9 December 2008

SOUTH AFRICA

On 6 February 2009, three Chinese businessmen appeared in the Middelburg Regional Court in connection with the smuggling of around 50 rhino horns, mainly out of Kruger National Park. It is the largest rhino-horn poaching event in South Africa's legal history. The trio, who were arrested in January 2009, were part of an illegal hunting ring also consisting of South African and Mozambican members.

At the end of March/early April 2009, the skipper of a Taiwanese-flagged vessel, the *Chien Jui No 102*, was fined R1.5m (USD166 000) for contravening permit conditions for foreign vessels entering the South African Exclusive Economic Zone (EEZ). This is the highest fine ever imposed for such a transgression. Shark skin and shark trunks confiscated from the vessel were also forfeited to the State.

The *Chien Jui No 102* was seized by fishery control inspectors of the Department of Environmental Affairs and Tourism (DEAT) on 14 March 2009 and more than 1.6 t of dried shark fins and 5.1 t of shark trunks were seized. The proportion of fins reported was in excess of the 15% tolerance limit permitted by the permit conditions. In addition, the permit conditions for foreign vessels entering the South African EEZ require such vessels to conduct fishing activities in accordance with the management and conservation measures of the relevant Regional Fisheries Management Organisations (RFMOs), including the International Commission for the Conservation of Atlantic Tunas (ICCAT). The *Chien Jui No 102* had on board approximately 1.6 t of shark fins without the appropriate corresponding quantity of shark trunks present. The variance of the shark fin to trunk ratio was more than five percent in contravention of ICCAT recommendations.

The vessel's owner applied to amend the permit after the discrepancy was discovered. The South African-based representatives for the owner of the vessel communicated to the department on behalf of their client that "the delay in applying for the amended EEZ permit was due to a misunderstanding as to when the amended permit ought to be applied for".

The vessel will be blacklisted on the IUU (Illegal, Unreported and Unregulated) fishing list of vessels involved in illegal fishing practice.

On 6 April 2009, DEAT officials arrested a man near Hermanus, after more than 2000 abalones *Haliotis* were found in the vehicle he was driving.

On 4 April 2009 another person was arrested in Hermanus and a total of 2474 abalones and a vehicle were confiscated. Court hearings are pending.

In April 2009, the Master and First Officer of two Korean-flagged vessels, the *MFV Oryong 371* and the *MFV Oryong 373*, were each sentenced to a fine of R500 000 (USD60 000), or five years' imprisonment. The sailors were guilty of contravening the permit conditions for foreign vessels entering the South African EEZ. Both vessels had discharged quantities of fish other than what was stipulated in their respective applications for an EEZ permit as well as exceeded the limit as set out in the application.

The *MFV Oryong 371* discharged a total of 18.5 t of fish although their application states they only had 7.5 t of fish on board the vessel for discharge. A total of 667 kg undeclared shark fins was also confiscated. The vessel was found guilty of transhipping 18.1 t of fish illegally without a valid permit.

The *MFV Oryong 373* discharged a total of approximately 10 t of fish. In their application they declared a total of 17.5 t of fish on board the vessel for discharge. Upon investigation, DEAT inspectors found that the species did not match the species stated on the application in addition to the lesser amount of fish discharged. Approximately 10 t of fish had been transhipped illegally without a valid permit. The vessel discharged a total of 389 kg of shark fin which exceeded the 15% tolerance limit permitted by the permit conditions. The crew also did not discharge shark trunks.

In addition to the sentences meted out, all the fish confiscated by the department was forfeited to the State. The department is in the process of providing all the details of both vessels to the appropriate international and regional fisheries organizations for consideration for further sanctions.

Drie Chinese in hof in SA se grootste renostersaak Dieburger.com, 8 February 2009; Department of Environmental Affairs and Tourism media statement, 14 March/6 April/29 April 2009: www.deat.gov.za; www.environment.gov.za/NewsMedia/MedStat/2009Mar16/14032009MedStatmnt.html; www.environment.gov.za/NewsMedia/MedStat/2009Apr6/medStatmnt06042009.doc

ZAMBIA

On 2 March 2009, four people, including two police officers, were arrested in Kafue for trading in 72 pieces of elephant ivory and five pieces of rhino horns. The items were packed in trunks with pieces of amethyst gemstones.

Officials of the Zambia Wildlife Authority (Zawa), Zambia police and Chilanga traffic officers carried out the arrests following information received from a member of the public.

Zawa Director General, Lewis Saiwana, said that for such a large amount of ivory, the poachers had killed 36 elephants but he said it was suspected that the animals were killed in neighbouring countries and not in Zambia.

"In our continued effort to clamp down on the scourge and illegal trafficking of wildlife products, Zawa stepped up its operations to arrest the situation."

Dr Saiwana said all Zambian rhinoceroses were safe and not endangered because of the stringent 24-hour security services provided by Zawa.

<http://allafrica.com/stories/200903021407.html>

ASIA

EAST ASIA CHINA

On 25 February 2009, at Yunnan Provincial Higher People's Court, Li Miwei was sentenced to life imprisonment for smuggling, over a period of several years, tablets containing pangolin *Manis* (CITES II) ingredients. Li, who ran a smuggling ring, was also fined CNY300 000 (USD44 000).

He was arrested in March 2007 along with other gang members, who received gaol terms of between three and five years.

At the Intermediate People's Court of Kunming City, Yunnan Province, on 21 August 2008, Li and seven others were charged with smuggling more than 20 t of pangolin scales. Li, who managed an internet bar in Menglian County, Pu'er City, as a front, was responsible for contacting buyers and purchasing pangolin scales from sellers in Myanmar which were then transported by his gang to Menglian County. He also bribed two post office clerks and posted the scales to buyers across the country.

The court said the gang had been smuggling pangolin scales on the border with Myanmar since 2001. The scales were mostly brought from India, Thailand, Nepal and Lao PDR before being transported to Yunnan via Myanmar.

In March 2009, at Dehong Prefecture Intermediate People's Court, Yunnan Province, Chinese businessman, Mr Yu, was sentenced to life imprisonment and his property confiscated after being found guilty of smuggling 78 python Pythonidae skins (CITES II and national Grade I protected wildlife). Yu was asked by his Burmese partner to transport the skins from Myanmar to Ruili City in Yunnan. Police seized the snakes from a taxi in Husa Village, Longchuan County, in July 2008. Yu's partner is still at large.

On 26 March 2009, at Ningbo Middle People's Court, Zhejiang Province, Cen Zhangyao was sentenced to death for smuggling Saker Falcons *Falco cherrug* (CITES II). Others involved in the smuggling—Wu Zheng, Zhang Hao and Qian Wenbin—were sentenced to life imprisonment.

All the birds had been transported to Ningbo by Cen Zhangyao for short-term feeding while illegal paperwork for their export was being prepared. Zhang Hao, a Ningbo Customs staff member, applied to export the birds under a false name. Wu Zheng and Qian Wenbin, who were responsible for security in Shanghai Pudong International Airport, allowed the falcons to be exported illegally. During the past year, the gang have smuggled 82 Saker Falcons.

www.chinadaily.com.cn/china/2009-02/26/content_7514712.htm; 26 February 2009; www.chinaview.cn/index.htm; www.chinaview.cn/2008-08-2207:35:32; <http://foster.aweb.com.cn/2009/0402/658101539380.shtml>, 8 April 2009; www.cwca.org.cn/Article/ShowArticle.asp?ArticleID=14862

Seizures in China involving ivory:

On 5 January 2009, border soldiers at the Hengjiang checkpoint, Fangchenggang City, Guangxi Province, confiscated 150 kg of suspected elephant tusks from a coach in Dongxing City, on route to Xiamen City, Fujian Province. The material was to be identified by the relevant authority.

On 6 January 2009, Kunming forest police seized 31 Asian Elephant *Elephas maximus* (CITES I) tusks (36 kg) that had been purchased in Yingjiang City, on the border with Myanmar. Two suspects were detained.

On 21 May 2009, at Chongqing No. 1 Intermediate People's Court, Chongqing City, a man, surname Cao, was sentenced to three years in gaol for smuggling ivory into the country which he had obtained while working in Japan; he sold 1.5 kg of ivory to two buyers over the internet.

Customs police officers found the ivory in the post in September and arrested Cao in October when he arrived in Shanghai from Japan.

The two buyers, named Qin and Zhang, were sentenced, respectively, to one year of imprisonment (with a one-year reprieve) and a six-month gaol term (with six-months' reprieve).

<http://news.sohu.com/20090107/n261621955.shtml>; http://lyn.yunnan.cn/html/2009-01/08/content_189454.htm; http://news.xinhuanet.com/english/2009-05/23/content_11424030.htm

HONG KONG

On 9 February 2009, at Hong Kong International Airport, Agriculture, Fisheries and Conservation Department personnel, in collaboration with the Customs and Excise Department, foiled an attempt by a Hong Kong resident to import in his luggage two Angonoka (Ploughshare) Tortoises *Astrochelys yniphora* (CITES I), 21 hedgehogs and 23 sugar gliders [species not reported] from Thailand.

The man will be charged under the *Prevention of Cruelty to Animals Ordinance (Cap 169)*, the *Protection of Endangered Species of Animals and Plants Ordinance (Cap 586)*, and the *Rabies Ordinance (Cap 421)*.

A total of 59 wildlife seizures have been made at Customs checkpoints from January to March this year, compared to 44 cases for the same period last year, according to a department spokesman.

Agriculture, Fisheries and Conservation Department press releases, 10 February/9 April 2009

TAIWAN

On 12 February 2009, at Taipei International Airport, luggage from Indonesia was seized after it was found to contain, in baskets and tubes, two Slow Lorises *Nycticebus coucang* (CITES I) and eight CITES II parrots (Moustached Parakeet *Psittacula alexandri*, Moluccan Lory *Eos bornea*, Eclectus Parrot *Eclectus roratus*, and Green-naped Lorikeet *Trichoglossus haematodus*).

In March 2009, Customs officials intercepted a parcel arriving by post from Tanzania. Inside they found 84 Leopard Tortoises *Geochelone pardalis* (CITES II).

The reptiles were destroyed owing to quarantine regulations. Since 2002, Taiwan has banned the importation of three tortoise species—Leopard Tortoise, African Spurred Tortoise *G. sulcata* (CITES II), and Bell's Hinged Tortoise *Kinixys belliana* (II)—owing to the risk of heartwater disease.

On 11 May 2009, at Taipei International Airport, two people returning from Jakarta, Indonesia, were stopped by Customs after 27 kg and 14.9 kg of agarwood *Aquilaria* (CITES II) was discovered in their respective luggage; no CITES permit could be presented. The agarwood was seized and the case has been sent to the district prosecution office.

www.libertytimes.com.tw/2009/new/feb/14/today-life4.htm; [Customs and Forestry police, Taiwan; http://news.chinatimes.com/2007Cti/2007Cti-Rtn/2007Cti-Rtn-Content/0,4526,110105+112009051100884,00.html](http://Customs.and.Forestry.police,Taiwan;http://news.chinatimes.com/2007Cti/2007Cti-Rtn/2007Cti-Rtn-Content/0,4526,110105+112009051100884,00.html)

SOUTH ASIA INDIA

In the latter part of 2008, Kerala State Forest Department officials became aware that some 11 species of owl were being smuggled from Kerala to Karnataka, Andhra Pradesh, north India and Gujarat. The eyes of the birds are reportedly used in black magic rituals in the belief that consumption will improve eyesight; the blood is also consumed. Investigations to locate agents trading in owls are now under way in the light of the findings that there is a well-established smuggling chain. Owls are fully protected under Schedule I of the *Wild Life Act*.

On 7 January 2009, personnel of the Customs Preventative Force stationed at Palle Gate, Chandel district, Manipur, seized 58.4 kg of deer [species not reported] horn antlers and 116 kg of pangolin *Manis* scales from a lorry travelling from Imphal towards Moreh, Manipur, on the border with Myanmar.

On 9 January 2009 it was reported that as many as 43 people were sentenced in Katni, Madhya Pradesh, for poaching and smuggling animal parts, including skins of Leopard *Panthera pardus* (CITES I) and Tiger *P. tigris* (I). Eleven people were sentenced to three-years' imprisonment, prominent among them known poachers Shabbir Qureshi, Darya Singh and Ashok Pardhi, who were arrested in June 2004. Singh had cases registered against him in Haryana, Uttar Pradesh and Bihar. A further 18 people were sentenced to two years' imprisonment and the remainder to one year in jail.

On 22 January 2009, more than five tonnes of tortoises—some 3000 animals—were seized in Allahabad, Uttar Pradesh, by the Special Task Force (STF) of the Uttar Pradesh police. This is one of the largest freshwater turtle hauls ever recorded. Three species listed in Schedule I of the *Wild Life (Protection) Act* were identified: Indian Softshell Turtle *Aspideretes gangeticus* (CITES I), Black Pond Turtle *Geoclemys hamiltonii*

(I) and Indian Flapshell Turtle *Lissemys punctata punctata* (II). The reptiles were contained in 60 jute sacks, some 50–55 specimens in each. They were released under a court order on the banks of the Yamuna, in the presence of STF officers, Uttar Pradesh State Forest Department officials, and two representatives from the Wildlife Protection Society of India (WPSI) who assisted in the case. Three people, who were transporting the turtles in a lorry, were arrested and sent to Naini Jail.

On 7 February 2009, a jeep carrying three tonnes of live tortoises [species not reported], again sourced from Uttar Pradesh and bound for Kolkata, was seized at a forest checkpoint near Barachatti in Gaya, Bihar.

On 31 January 2009, the north-east district police of Delhi confiscated a large consignment of art brushes made out of mongoose hair at a factory in the Bhajanpura area. Police officers arrested two people and the owner is being sought. All species of mongoose *Herpestes* are protected under Schedule 2 Part II of the *Wildlife Protection Act, 1972*.

According to Saurabh Gupta, wildlife officer from People for Animals, who notified the police about the consignment, more than 30 000 brushes were confiscated, part of a consignment to be sent by road from Delhi to Mumbai. Gupta states that to make the brushes, the live mongoose is killed by placing it in boiling water where it remains for several hours, after which time its skin and hair is removed by machine. Between one and five grammes of hair are recovered from one mongoose, which means that this consignment was derived from over 100 000 specimens. The brushes are made in the Sherkot area of Bijnor district, Uttar Pradesh, and are sold worldwide. The owner of the factory has similar cases registered against him following raids at outlets belonging to him in other parts of the city. A case under the *Wildlife Protection Act* has been registered and investigations into the matter continue.

On 16 February 2009, personnel from Assam Rifle's 20th battalion in Chandel district, Manipur, seized animal parts, including skulls of two Tigers *Panthera tigris* (CITES I), two Tiger paws, 16 kg of Tiger bones, 340 kg of pangolin *Manis* (CITES II) shell and 191 deer antlers from a lorry at a checkpoint in Bongyang village. The vehicle was heading towards Moreh, on the border with Myanmar. Sources said that the consignment was to be smuggled to Myanmar from where it would have headed to East and South-east Asian markets.

According to Pranabesh Sanyal, former director of the Sunderbans Tiger Reserve, it is possible that the animals were poached in eastern Uttar Pradesh. "This seems to be a new route that the poachers are using to smuggle animal parts to South-east Asia," he said.

The Moreh-Myanmar and Assam-Siliguri routes are the major conduits for trade in illegal wildlife parts from the north-eastern region and, reportedly, from other States in the country, including Red Sandalwood *Pterocarpus santalinus* (CITES II) from Andhra Pradesh (see below).

On 26 February 2009, at Bhavnagar Court, in Gir, Gujarat, Prabhakar Keshav Gajakosh was sentenced to five years' 'rigorous' imprisonment (or hard labour) for poaching Asiatic Lions *Panthera leo persica* (CITES I). Others, members of a gang of which Gajakosh was leader, and who are already in prison for an earlier Lion smuggling case, were sentenced to terms of up to five years' 'rigorous' imprisonment and fines of Rs2000 (USD40). They will serve both sentences concurrently and were also each fined Rs2000. This is a landmark judgement in the country for a wildlife poaching case.

Gajakosh, well known to the police and with national and international links, was arrested on 13 December 2007 following information passed on to Karnataka police officials by the Gujarat police force. In his possession were skins of 23 Leopards *Panthera pardus* (CITES I), three Tiger (I) skins and 20 river otter skins.

On 20 March 2009, in one of the biggest operations to combat the illegal trade in wildlife parts, officers of the Assam police, the Central Reserve Police Force and State Wildlife officials carried out search operations near Manas National Park in Barpeta district where they recovered skins and bones of animals including Leopard *Panthera pardus* (CITES I), Tiger *P. tigris* (I), Gaur *Bos gaurus* (I), and deer. Sixteen people were arrested.

http://timesofindia.indiatimes.com/Earth/Kerala_Smuggling_of_owls/articleshow/3749664.cms, 24 November 2008; [The Sangai Express, 12 January 2009, www.e-pao.net/GP.asp?src=3.130109.jan09; http://timesofindia.indiatimes.com/Health_Science/Earth/43_jailed_for_smuggling_animal_parts_in_MP/articleshow/3962751.cms](http://The.Sangai.Express,12.January.2009,www.e-pao.net/GP.asp?src=3.130109.jan09;http://timesofindia.indiatimes.com/Health_Science/Earth/43_jailed_for_smuggling_animal_parts_in_MP/articleshow/3962751.cms); [Wildlife Protection Society of India, www.wpsi-india.org/news/25012009.php, 25 January 2009; www.zenews.com/states/2009-02-07/505638news.html; http://timesofindia.indiatimes.com/Delhi/30000_mongoose_hair_brushes_seiz ed_2_held/articleshow/4057990.cms](http://Wildlife.Protection.Society.of.India,www.wpsi-india.org/news/25012009.php,25.January.2009;www.zenews.com/states/2009-02-07/505638news.html;http://timesofindia.indiatimes.com/Delhi/30000_mongoose_hair_brushes_seiz ed_2_held/articleshow/4057990.cms); www.thestatesman.net/page.arcview.php?clid=10&id=276710&usress=1,14; [Health Science/Earth/Tiger-skulls-drugs-bound-for-China-seized-in-Manipur/articleshow/4152868.cms](http://timesofindia.indiatimes.com/Health_Science/Earth/Tiger-skulls-drugs-bound-for-China-seized-in-Manipur/articleshow/4152868.cms), 19 February 2009; [India/16-poachers-get-5-yr-jail-for-killing-Gir-lions/rssarticleshow/4198248.cms](http://timesofindia.indiatimes.com/India/16-poachers-get-5-yr-jail-for-killing-Gir-lions/rssarticleshow/4198248.cms); [Cities/Rajkot/From-timber-to-tiger-skin-trade-Gajakosh-did-it-all/articleshow/4197270.cms](http://timesofindia.indiatimes.com/Cities/Rajkot/From-timber-to-tiger-skin-trade-Gajakosh-did-it-all/articleshow/4197270.cms), 26/27 February 2009; [www.theshillongtimes.com, 23 March 2009; Akhilesh Kumar, TRAFFIC India, in litt., 16 April 2009](http://www.theshillongtimes.com,23.March.2009;Akhilesh.Kumar,TRAFFIC.India,in.litt.,16.April.2009)

Seizures involving Red Sandalwood *Pterocarpus santalinus* (CITES II)

In December 2008, personnel of Assam Rifles 20th battalion (a paramilitary force) at Bongyang village, Chandel district, Manipur, seized 75 kg of Red Sandalwood *Pterocarpus santalinus* (CITES II), along with elephant (I) tusks, trunks and jaw parts, deer skins and deer antlers. The consignment had been on its way to Myanmar through Moreh, Manipur, on the border with Myanmar.

On 9 December 2008, officials of the Directorate of Revenue Intelligence (DRI), Coimbatore, seized 10.5 t of Red Sandalwood logs. The consignment was bound for Kochi from Bangalore and was intended for export. The logs have been deposited at the Inland Container Depot at Singanallur, Tamil Nadu.

On 24 December 2008, a joint raid conducted by the police and Sashastra Seema Bal (SSB) (a border guarding force) at Gossaigaon, in Kokrajhar district, Western Assam, yielded around 630 deer antlers and nearly 3000 kg of Red Sandalwood. No arrests were made. The raid was carried out at a saw mill that had closed down several years earlier following a Supreme Court ban on tree-felling in the north-eastern region in 1996. Kokrajhar Divisional Forest Officer (Wildlife), Sonali Ghosh, said the recovery of such a huge consignment had confirmed that a powerful international racket was at work in the area.

On 3 April 2009, police and forest personnel seized an undisclosed amount of Red Sandalwood from a lorry at Kurunji Nagar checkpoint, Dharmapuri, Tamil Nadu. There were three arrests.

<http://timesofindia.indiatimes.com/Health-Science/Earth/Tiger-skulls-drugs-bound-for-China-seized-in-Manipur/articleshow/4152868.cms>; www.thehindu.com/2008/12/12/stories/2008121260250800.htm; www.indianexpress.com/news/huge-haul-of-animal-parts-in-assam/403031/; www.hindu.com/2009/04/05/stories/2009040558940800.htm; Akhilesh Kumar, TRAFFIC India, in litt., 16 April 2009

PAKISTAN

In March 2009, Sindh Wildlife Department officials seized a consignment of some 550 Horsefield's Tortoises *Testudo horsefieldii* (CITES II) from the cargo compartment of a Quetta-Karachi bound train. The Pakistan Railways must check before registering any cargo to see what it holds; these boxes had been officially registered as normal cargo. Daulat Khan was arrested and fined Rs2000 (USD40). He was ordered to sign an agreement that he will stop capturing and trading tortoises; if he reoffends he will be fined Rs0.5 million.

The tortoises were to be released in the wild. They had been collected from the apple and grape orchards of Quetta, Naushaki and other districts of Balochistan; they were to be sold at market in Karachi. Fish aquaria in Karachi have apparently started to keep this species as showpieces and the reptile is also in demand in the pet trade.

www.dailytimes.com.pk/default.asp?page=2009%5C03%5C05%5Cstory_5-3-2009_pg12_6, 5 March 2009

SOUTH-EAST ASIA

In the last six months of 2008, law enforcement action against illegal wildlife traders throughout South-east Asia was stepped up and resulted in the seizure of more than 24 175 specimens of protected species destined for restaurants, tanneries, the pet trade and other industries, and led to more than 100 arrests. This action reflects the commitment and increasing capacity of the ASEAN-WEN (Association of Southeast Asian Nations Wildlife Enforcement Network) to fight wildlife crime. Under ASEAN-WEN, more officers are being trained to detect, investigate and act against illegal trade.

"The number of illegal wildlife shipments being seized shows that authorities throughout South-east Asia have stepped up their efforts to stop trafficking in protected species this year," said Dr Chumphon Suckaseam, Senior Officer for the ASEAN-WEN Program Co-ordination Unit (the

Bangkok-based operational headquarters of ASEAN-WEN).

In total, 25 major wildlife law enforcement actions have been reported by local authorities since July 2008, eclipsing the 16 reported for the same period in 2007. Where possible, rescued animals were placed in rehabilitation centres. Over 14 t of dead animals were also recovered by authorities in the second half of 2008, most of which were destroyed.

[ASEAN-WEN PressRelease_ASEANStepsupFightAgainst-WildlifeCrim.pdf](http://www.asean-wen.org/index.php?option=com_content&view=article&id=75:major-wildlife-law-enforcement-actions-southeast-asia-july-december-2008&catid=34:law-enforcement-actions&Itemid=86), 18 December 2008

CAMBODIA

On 9 November 2008, Cambodia's Wildlife Rapid Rescue Team (WRRRT) rescued hundreds of live reptiles from traffickers in Kg Chnnang Province. More than 485 kg of turtles, tortoises and snakes, including Burmese Pythons *Python molurus* (CITES II) and Yellow-headed Temple Turtles *Hieremys annandalii* (II) were recovered from two vehicles headed for the Viet Nam border. Two people were arrested.

www.asean-wen.org/index.php?option=com_content&view=article&id=75:major-wildlife-law-enforcement-actions-southeast-asia-july-december-2008&catid=34:law-enforcement-actions&Itemid=86

INDONESIA

On 16 November 2008, sea port police seized some 150 kg of frozen pangolin *Manis* (CITES II) meat found in boxes in an empty taxi at Bahauheni Port, Lampung.

On 23 March 2009, police in Bali arrested a Czech national wanted internationally for his alleged leading role in a wildlife smuggling network in Brazil. The arrest came after intensive investigative and surveillance work by Indonesian police officers who were able to locate and arrest him on the basis of an INTERPOL Red Notice (issued to seek the provisional arrest of a wanted person with a view to extradition based on an arrest warrant or court decision), and international law enforcement intelligence after he entered the country. The operation followed information received from the Czech police and involved collaboration between INTERPOL's National Central Bureaus (NCBs) in Brasilia, Jakarta, Prague, Malaysia and Qatar, the Czech Environmental Inspectorate, Austrian authorities, and INTERPOL's Fugitive Investigative Support (FIS) unit in Geneva.

"All crimes with an international dimension call for international law enforcement co-operation. The arrest of this wanted individual demonstrates the results that can be achieved when the fight against crime is taken to the frontline as part of concerted international action using global law enforcement networks and resources," said INTERPOL's Executive Director of Police Services, Jean-Michel Louboutin.

www.asean-wen.org/index.php?option=com_content&view=article&id=75:major-wildlife-law-enforcement-actions-southeast-asia-july-december-2008&catid=34:law-enforcement-actions&Itemid=86; Interpol media release, 24 March 2009: www.interpol.int/Public/ICPO/PressReleases/PR2009/PR200925.asp

MALAYSIA

On 2 November 2008, marine police based in Sandakan seized 10 000 Green Turtle *Chelonia mydas* (CITES I) eggs that had been abandoned on Kampung Forest beach; four people escaped by speedboat. This is the largest seizure of turtle eggs by local authorities in 2009 to date.

On 29 April 2009, 15 t of Red Sandalwood (CITES II) *Pterocarpus santalinus* was seized at the Westport Free Zone, following weeks of surveillance by the Port Klang Authority and the Malaysian Timber Industry Board (MTIB). The wood was exported from Haldia Port in Orissa, India (where it is found only in Cuddhpah and Chittoore, in Andhra Pradesh), and was on its way to China where it is in high demand.

MTIB Director-General Dr Jalaluddin Harun said the huge demand for the rare sandalwood had enticed smugglers to use Westport as a transshipment route in the illegal trading of the exotic wood.

"The sandalwood was declared as galvanized iron. Cut as logs measuring 1.2 m to 3.4 m with a width of 20 cm, all the 269 Red Sandalwood logs were stacked in a container," he said. He added that smugglers had attempted to use Malaysia, Singapore and even Myanmar as transshipment hubs to bring the wood to China.

Red Sandalwood does not yield oil and is fragrant when fresh. It is used in the carving of statues of Chinese deities, altars, traditional musical instruments and furniture.

Dr Jalaluddin said that MTIB had uncovered seven smuggling cases involving Red Sandalwood this year to date.

Port Klang Free Zone manager R. Sri Muhunan said the port risk management team would continue to be on high alert for such smugglers.

"We will work with the authorities and neighbouring ports to ensure that illegal trading of exotic wood is curbed."

http://www.asean-wen.org/index.php?option=com_content&view=article&id=75:major-wildlife-law-enforcement-actions-southeast-asia-july-december-2008&catid=34:law-enforcement-actions&Itemid=86<http://thestar.com.my/news/story.asp?file=/2009/5/20/nation/3944561&sec=nation>

Pangolin seizures in Malaysia:

On 19 October 2008, marine police seized 42 pangolins *Manis* (CITES II) from a vessel in the Malacca Straits and arrested two people who are being investigated under Sections 64 and 66(2)(a) of the *Wildlife Protection Act 1972*. The boat was handed over to the Department of Wildlife and National Parks.

On 25 November, Malaysian marine police from Maur seized 65 pangolins in a raid on a house in Bukit Pasir. Three people were detained. On 3 December 2008 they seized a further 44 pangolins from a fishing boat near Sungai Balang. Two suspects were detained.

The New Straits Times (Malaysia): www.nst.com.my/Current_News/NST/Sunday/NewsBreak/2008/01922072/1/Article/pppull_index.html; 19 October 2008; http://www.asean-wen.org/index.php?option=com_content&view=article&id=75:major-wildlife-law-enforcement-actions-southeast-asia-july-december-2008&catid=34:law-enforcement-actions&Itemid=86



PHOTOGRAPHS: CHRIS R. SHEPHERD

BROWN WOOD-OWLS (INSET) WERE AMONG OVER 900 DEAD OWLS (PICTURED, IN PLASTIC BAGS) RECOVERED DURING A RAID IN MALAYSIA THAT ALSO INCLUDED THE SEIZURE OF OVER 7000 LIVE CLOUDED MONITORS.

Seizures in Malaysia including ClouDED Monitors:

Several major seizures over the last year highlight the high volume of ClouDED Monitors *Varanus nebulosus* in illegal trade. The species is listed in CITES I and totally protected under Malaysian law.

On 21 October 2008, the East Coast Marine Police Intelligence Unit seized a total of 1272 animals, including 1244 ClouDED Monitors that were stored in plastic containers and wooden crates in a jungle cabin at Bukit Astana, Indera Mahkota, in Kuantan, the capital of Pahang. Also seized were 17 Common Water Monitors *Varanus salvator* (CITES II) and 11 pythons Pythonidae. All animals, which are protected under the *Wildlife Animal Protection Act 1972*, were handed over to the Wildlife and National Parks Department (Perhilitan). It is believed they were being stored before shipment to markets in China, Hong Kong and Thailand. No one was present when the cabin was raided but the case is under investigation.

During two raids in November 2008, staff of Perhilitan seized over 7000 live ClouDED Monitors and almost 900 dead owls. A local man was arrested but pleaded not guilty and has been released on bail.

During the first raid, on 4 November, in Muar, in the State of Johor, officials recovered from a freezer and storage room some 796 Barn Owls *Tyto alba*, 95 Spotted Wood-Owls *Strix selaputo*, 14 Buffy Fish Owls *Ketupa ketupu*, eight Barred Eagle-Owls *Bubo sumatranus* and four Brown Wood-Owls *Strix leptogrammica*, two Crested Serpent-Eagles *Spilornis cheela*, Reticulated Python *Python reticulatus*, Malayan Pangolin *Manis javanica* (all species listed in CITES II); 51 live ClouDED Monitors, Sun Bear *Helarctos malayanus* (CITES I), four live juvenile Wild Pigs *Sus scrofa*, plus parts of one or more Wild Pig, Malayan Porcupine *Hystrix brachyura* and Greater Mouse Deer *Tragululus napu*.

Information obtained during that raid led to a search of a storage facility in Segamat, Johor, on 7 November, where 7093 live ClouDED Monitors were seized.

"The number of owls and monitor lizards seized is truly staggering," said Chris R. Shepherd,

Senior Programme Officer for TRAFFIC's Southeast Asia office. "This is the first time we know of where 'ready-prepared' owls have been seized in Malaysia, and it may mark the start of a new trend in wild meat from the region. We will be monitoring developments closely."

As well as being listed in CITES, all the species receive some degree of protection under Malaysian legislation. The specimens are believed to have originated in Malaysia and were probably bound for China, to be sold in wild meat restaurants.

In December 2008, at Kuala Lumpur International Airport cargo complex, Perhilitan staff foiled an attempt to smuggle 676 ClouDED Monitors out of the country during an inspection of white gunny sacks. The lizards were found hidden under boxes of fish; also seized were python meat and skin, and civet meat. A man was arrested.

On 11 January 2009, Perhilitan staff raided a car repair workshop in Jalan Bukit Ubi and discovered a massive haul of meat destined for the restaurant trade, and over two thousand live reptiles being held in cages, including 2330 live ClouDED Monitors, as well as 25 hind legs and 22 paws of Malayan Sun Bears *Helarctos malayanus* (CITES I) and 319 skinned owl carcasses. Three men were arrested and released. The department was to use DNA samples to confirm the origin of the animals. All the remains were sent to Perhilitan headquarters in Kuala Lumpur. The ClouDED Monitors were to be released in their natural habitat.

On 15 April 2009, Perhilitan officials stopped a lorry carrying 1202 ClouDED Monitors on a highway in Pahang. The officers from Pahang, joined by their counterparts from the department's Wildlife Crime Unit in Kuala Lumpur, gave chase when a five-tonnes lorry they flagged down refused to stop. The officers discovered the live lizards in bags in the back of the lorry. Initial investigations revealed the lorry driver and two assistants had come from the southern state of Johor to buy the lizards from indigenous people who had caught the reptiles along the east coast of Peninsula Malaysia.

The haul was believed to be destined for the restaurant trade overseas. Based on information

from this seizure, the team later raided the home of a man in an indigenous peoples' settlement nearby and seized another 34 more ClouDED Monitors and two Dumeril's Monitor Lizards *V. dumerilii*. All the lizards have since been released back into the wild.

www.nst.com.my/Current_News/NST/Wednesday/National/2382187/Article/index_html, 22 October 2008; TRAFFIC Southeast Asia; www.wildlifeextra.com/go/news/malaysia-crime827.html, 19 November 2009; The Star (Malaysia), 21 December 2008; www.traffic.org/home/2009/4/17/clouded-and-dumerils-monitor-lizards-seized-in-malaysia.html, 17 April 2009; www.nst.com.my/Current_News/NST/Tuesday/National/2451713/Article/pppull_index_html, 13 January 2009

PHILIPPINES

On 19 October 2008, rangers guarding the Tubbataha National Marine Park arrested 45 suspected poachers from Cebu after they tried to bribe the guards to allow them to collect samung, or Top Shell *Trachus niloticus* (a marine gastropod). Park manager Angelique Songco expressed concern over the increasing illegal incursion of samung gatherers in Tubbataha, stating that they had already apprehended over 200 samung gatherers from Cebu and northern Palawan in the past year.

The suspects face criminal charges, including violation of *Fisheries Administrative Order No 28* which classifies samung as a threatened species.

The shell of the snail is characterized by a lustrous mother-of-pearl layering and used primarily for high-quality buttons and ornamental materials. It is reportedly bought at a high price by traders mainly based in Cebu.

On 8 December 2008, police officials recovered 300 Common Hill Mynahs *Gracula religiosa* (CITES II), three Mongooses *Herpestes* and a Binturong *Arctictis binturong* (III).

Southern Luzon Bureau, 22 October 2008, http://news info.inquirer.net/breakingnews/regions/view/20081022-167879/45-poachers-nabbed-in-Tubbataha-Reefs; www.asean-wen.org/index.php?option=com_content&view=article&id=75:major-wildlife-law-enforcement-actions-southeast-asia-july-december-2008&catid=34:law-enforcement-actions&Itemid=86

THAILAND

On 18 December 2008, Customs officers intercepted a lorry in Prachuab Khirikhan Province and found 130 pangolins *Manis* (CITES II) in cases. The Thai driver was arrested. The mammals, brought in from Songkhla Province, were believed to be for export to China.

In February 2009, police at a checkpoint in Chaiphaphum intercepted a vehicle carrying 66 pangolins into Lao PDR. Two people were arrested. The pangolins had been purchased at a petrol station from a Thai man who had smuggled the animals from the south of the country; they were to be transported to an individual in Nonthaburi in Lao PDR.

Fishermen in Trang, a coastal province on the Indian Ocean, have asked the government to control the illegal trade in Dugongs *Dugong dugon* (CITES I) after they found many foreign fishermen hunting the animals and smuggling

VIET NAM ENVIRONMENTAL POLICE



THIS TIGER SKELETON WAS AMONG MORE THAN TWO TONNES OF TIGER BONES AND OTHER ANIMAL PARTS SEIZED IN VIET NAM IN JANUARY 2009—THE LARGEST-EVER SEIZURE OF ANIMAL PARTS IN THE COUNTRY.

A SEPARATE SHIPMENT SEIZED IN VIET NAM IN MARCH 2009 (BELOW LEFT) CONSTITUTED A RECORD AMOUNT OF IVORY SEIZED IN THE COUNTRY.

HAI-PHONG CUSTOMS, VIET NAM



them out to Singapore. The illegal hunt is reported to be carried out by foreign fishermen especially from the neighbouring southern province of Satun, on the border with Malaysia, who reportedly throw bombs into cairns or near coral reefs, with the resulting explosion bringing up many fish. Singapore is said to be the biggest market for the trade in Dugongs for medicine and amulets.

www.straitstimes.com/print/Breaking%2BNews/SE%2BAsia/Story/STIStory_316412.html, 19 December 2008; www.newvision.co.ug/D/81121675746, 24 March, 2009; www.nationmultimedia.com/breakingnews/30095160/Police-rescue-pangolins-in-Chaiyaphum; 23 March 2009; www.asiaone.com/News/Latest%2BNews/Asia/Story/ASStory/20090323-130364.html

VIET NAM

On 19 December 2008, Customs officials seized some five tonnes of frozen pangolin *Manis* (CITES II) meat in northern Quang Ninh Province, believed to be bound for China. The consignment, in 270 boxes, was reported to have come from 1481 pangolins.

On 10 January 2009, in the country's largest-ever seizure of illegally traded wildlife products, Hanoi's Environmental Police confiscated more than two tonnes of Tiger *Panthera tigris* (CITES I) bones, bear paws and gall bladders, as well as piles of other animal bones.

The investigation began after Environmental Police officers apprehended a man who was found to be transporting a set of Tiger bones and 10 kg of bones and horns of Serow *Naemorhedus sumatraensis* (CITES II) in the city's Ba Dinh district. That same day, 10 police

officers raided a store in the Dong Da district belonging to the suspect where the wildlife parts were destined. Another set of Tiger bones, six frozen pieces of Tiger skin, seven bear (CITES I) paws, 16 bear gall bladders, six porcupine stomachs and 69 bags of bones from various wild animals were discovered. The testimony of the suspect led to the arrest of a man manufacturing Tiger bone gel in a warehouse belonging to the suspect.

"While this case underscores the very serious threat that illegal trade poses to many of Viet Nam's endangered wildlife populations, we continue to be impressed and encouraged by the good work that the Environmental Police are doing," said Nguyen Dao Ngoc Van, of TRAFFIC's Greater Mekong Programme in Viet Nam. Van says the case is the latest in a string of major seizures, and reflects Hanoi's improved enforcement capacity since the Environmental Police were established as a division of the Hanoi Police Department in 2007.

"The presence of the Environmental Police in Viet Nam will change illegal wildlife trade for the better," Van said.

Nevertheless, TRAFFIC was critical of Viet Nam's decision to auction off confiscated pangolins in Hai Phong in October 2008. Two months later Customs officials seized another 4400 kg of frozen pangolins and 900 kg of pangolin scales in Cai Lan seaport, Quang Ninh.

"Selling off the seized pangolins sent out entirely the wrong message," said Sulma Warne, TRAFFIC's Greater Mekong Programme Coordinator. "Whilst it was permissible under Vietnamese law, it undermined the very enforcement efforts that led to the seizure, for which the government received much-deserved praise."

"The latest seizure in Quang Ninh reaffirms the need to destroy all seized wildlife products, as sell-offs such as the one in October only help to increase demand for pangolins in the region. We call on the authorities to think carefully about how they deal with the seized pangolins in this case," Warne added.

In January 2009, Forest Protection Department officials acting on information, intercepted a lorry in Binh Dinh Province travelling towards the Chinese border with 24 King Cobras *Ophiophagus hannah* (CITES II) (40 kg) on board. The driver stated that the snakes had been

collected from the wild just hours before; once the specimens had been individually inspected and found to be in good condition, it was decided to release them immediately in selected sites in Cat Tien National Park. Staff of Cu Chi Wildlife Rescue Centre (CCWRC) assisted in the confiscation and release of the snakes.

On 6 March 2009, at Dinh Vu Port, Hai Phong city, Customs officials discovered over six tonnes of tusks contained in 114 boxes of cartons covered with bags of plastic waste—the largest-ever seizure of tusks in the country. The container was on a ship carrying a Malaysian flag which arrived at the port on 28 February. The receiver written in the bill of lading is a company based in Hai Phong city. The smuggled goods started their journey in Tanzania in late January 2009, and transited Malaysia before entering Viet Nam.

Each of the tusks was cut into two to three sections and numbered. According to the initial appraisal, the tusks belong to African Elephants *Loxodonta africana* (CITES I) and were from specimens of all ages. It was reported that the department would be handing all documents and exhibits from the case over to the Hai Phong police for further investigation.

"The Vietnamese enforcement authorities are to be congratulated for their vigilance in bringing about this important seizure," commented Steven Broad, Executive Director of TRAFFIC. "This incident underlines TRAFFIC's earlier warnings about the involvement of organized criminal gangs in ivory smuggling," he said.

In February 2009, a TRAFFIC report revealed record prices for illegal ivory in Viet Nam and in 2007 another TRAFFIC report presented to the 14th meeting of the Conference of the Parties to CITES warned that Asian-run organized crime syndicates based in Africa were being implicated in the increase in illegal elephant ivory trade in Asia (see also pages 83–91 in this issue).

<http://timesofindia.indiatimes.com/articleshow/msid-3873473.prt?page-1.cms>, 22 December 2008; www.ens-newswire.com/ens/jan2009/2009-01-21-02.asp, 21 January 2009; www.traffic.org/home/2009/11/19/hanois-environmental-police-record-largest-ever-seizure.html; www.nhandan.com.vn/english/life/300309/life_cas.htm, 30 March 2009; www.traffic.org/home/2009/3/9/massive-ivory-seizure-in-viet-nam.html, 9 March 2009; www.wildlifeextra.com/gol/news/vietnam-cobras009.html#cr271031209

OCEANIA

AUSTRALIA

On 7 January 2009, an Indonesian fishing vessel was apprehended inside the Australian Fishing Zone, 320 nautical miles north-west of Broome, Western Australia, during an operation coordinated by Border Protection Command. On board were approximately two tonnes of tuna, 30 kg of shark fin and 10 kg of shark fillet. The 12 crew members were to be transported to Darwin for further investigation by the Australian Fisheries Management Authority.

On 20 February 2009, Customs and Border Protection officials arrested a Sydney man for allegedly attempting to smuggle 44 native reptiles out of Australia through Sydney International Airport, bound for Bangkok. The reptiles, detected during x-ray screening of the man's luggage, consisted of 24 Shingleback Lizards *Tiliqua rugosus*, 16 bluetongue lizards *Tiliqua*, three Black-headed Pythons *Aspidites melanocephalus* (CITES II) and one albino Carpet Python *Morelia spilota* (II), an endangered species with numbers in the wild estimated to be as low as 100.

Officials removed the man from the aircraft and he was subsequently arrested and granted conditional bail. He will face charges relating to the export of native species without a permit under section 303DD(1) of the *Environment Protection and Biodiversity Conservation Act 1999*.

The reptiles are being cared for at Sydney Wildlife World.

Australian Customs media releases, 8 January/23 February 2009

NEW ZEALAND

In June 2008, at Auckland Airport, Border Inspection officials intercepted a Vietnamese national arriving from Viet Nam after she was found to be concealing 24 vials of bear bile inside packets of tea contained in her baggage, in contravention of S44(1)(b) of the *Trade in Endangered Species Act 1989*.

The suspect claimed the substance was tree oil but forensic analysis confirmed the presence of Black Bear *Ursus thibetanus* (CITES I). She was charged and appeared in court, was granted bail and absconded. She is believed to be in Viet Nam and a warrant has been issued for her arrest.

New Zealand Wildlife Enforcement Group

AMERICAS

CANADA

On 17 February 2009, at Richmond Provincial Court, Wing Quon Enterprises Ltd of Richmond, British Columbia, was fined CAD45 000 (USD36 500) after pleading guilty to possessing medicines containing Tiger *Panthera tigris* (CITES I) parts for the purpose of offering for sale. The company was also ordered to forfeit medicines and products containing wildlife ingredients from the following CITES species: Tiger, Costus root *Saussurea costus* (I), Agarwood *Aquilaria* (II), bear, pangolin *Manis* (II) musk deer *Moschus* (I/II) and rhinoceros (I).

This is the first conviction in Canada under the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* (WAPPRIITA) for the offence of possessing Tiger, for the purpose of selling or offering to sell it.

CAD40 000 of the fine will be directed to TRAFFIC, which has been assisting Environment Canada on this investigation—which began three years ago—by providing information on the trade and conservation of the species involved.

Environment Canada news release, 18 February 2009: www.ec.gc.ca

CHILE

A navy patrol boat in Arica captured a small vessel travelling by night from Peru after it was found to contain more than 400 wildlife specimens. The animals, in nets and cages, included 308 marine turtles, 40 tortoises, 11 caimans, 20 macaws, 20 loros, three toucans and 25 squirrels [species undisclosed].

A crew member of the vessel, who was detained, confessed that the animals had been obtained in Los Palos, Peru, and were being brought to Chile for sale. He was prosecuted for possession of illegal contraband and mistreatment of animals. The shipment was returned to Peru.

www.elcomercio.com.pe/ediciononline/HTML/2009-01-13/capturan-chile-lancha-peruana-animales-exoticos-contrabando.html

PERU

On 14 January 2009, a lorry containing some 12–14 t of seaweed was intercepted and three people were arrested. The suspects—miners and farmers who had left their usual activities motivated by the demand for seaweed as manure and for food—had been operating on various beaches in Ocucaje (Ica district, southern Peru), in contravention of a Ministerial Resolution (No. 839), issued on 5 December 2008, which prohibits the extraction, removal or processing of this resource in coastal regions.

The authorities indicated that the seaweed would either be incinerated or sold to a firm operating legitimately. The case is under investigation.

On 11 February 2009, ecology police officials undertaking a routine search of a national police aircraft in the province of Purus uncovered

more than 3500 pieces of Big-leaf Mahogany *Swietenia macrophylla* (CITES II). The police were initially refused entry to the aircraft and had to get a search warrant. Following seizure of the timber, it was transported to a warehouse belonging to INRENA (National Institute of Natural Resources); the plane was grounded until the investigation is concluded.

On 14 February 2009, some 150 Vicuñas *Vicugna vicugna* (CITES I/II) in the Huancabamba community in Andahuaylas Province were killed for their fleeces; the poachers fled the scene when police arrived, leaving the wool behind. Other items left at the scene suggest an organized criminal gang from Bolivia may have been responsible.

www.elcomercio.com.pe/edicionimpresa/HTML/2009-01-15/decomisan-mas-10-toneladas-algas.html; www.gacetacayalina.com/2009/02/intervienen-avion-de-la-pnp-con-car-ga-ilegal-de-caoba-en-aeropuerto-de-pucallpa.html, 11 February 2009; www.elcomercio.com.pe/noticia/246982/cazadores-furtivos-matan-mas-50-vicunas-andahuaylas, 16 February 2009; www.elcomercio.com.pe/noticia/247986/banda-internacional-podria-culpable-matanza-vicunas-apurimac, 18 February 2009

USA

On 13 January 2009, Pa Lor and Tia Yang, both of Minnesota, were sentenced for conspiracy to import wildlife into the country and were sentenced to two years' probation. In addition, Yang was sentenced to five months' home confinement, 40 hours of community service and fined USD9000. As part of Lor's sentence, she also agreed to work with federal officials to develop educational materials designed specifically for the Hmong community.

The case against the two women began in October 2005 when Lor was found attempting to smuggle 1388 pieces of wildlife into the country through the Minneapolis-St Paul International Airport following her return from Lao PDR. This led to a three-year, multi-agency investigation into Lor's and Yang's illegal wildlife smuggling operation, and involved co-operation between the US Fish and Wildlife Service (USFWS), Customs and Border Protection and the US Food and Drug Administration.

Over 5000 items and body parts were seized during the investigation and derived from, among many species, Asian Elephant *Elephas maximus* (CITES I), Serow *Naemorhedus sumatraensis* (I), Red-shanked Douc Langur *Pygathrix nemaeus nemaeus* (I), Clouded Leopard *Neofelis nebulosa* (I), Asiatic Golden Cat *Catopuma temminckii* (I), Leopard Cat *Prionailurus bengalensis* (I/II), Slow Loris *Nycticebus coucang* (I), Asian Tapir *Tapirus indicus* (I), pangolin *Manis* (II) and included some 120 Asian Salamanders *Paramesotriton laensis*—a species only discovered in 2002, and only found in Lao PDR.

As part of the investigation, the USFWS arranged for two undercover operations at Lor's place of business during both of which agents were sold parts of endangered species. On one of these occasions, Lor explained how she was able to bring these items into the country illegally. In addition, she told the agent that because these items were illegal to possess, he needed to be careful how he transported them to ensure he wasn't caught with the items.



MARTIN HARVEY / IWWF-CANON

RED-SHANKED DOUC LANGUR *PYGATHRIX NEMAEUS NEMAEUS* (CITES I) IS ONLY FOUND IN NORTH AND CENTRAL VIET NAM AND LAO PDR. SPECIMENS WERE AMONG WILDLIFE SEIZED IN THE USA DURING A THREE-YEAR INVESTIGATION WHICH CONCLUDED IN JANUARY 2009.

On 13 February 2009, a German national, was arraigned in the US District Court in Alexandria, Virginia, charged on three felony counts with smuggling protected coral into the port of Portland, Oregon, three felony counts of violating the *Lacey Act* and three misdemeanor charges of violating the *Endangered Species Act*.

Law enforcement officials arrested the suspect on 11 February as he entered the country at Dulles Airport, en route to the Global Pet Expo in Orlando, Florida. He is reported to own a company, based in Essen, Germany, and has sold various coral products to retailers in the USA. An investigation was launched in 2007 after the suspect tried to ship to Portland a container loaded with fragments of coral taken from reefs off the Philippine coast. After this initial shipment, agents subsequently seized two full containers of endangered coral shipped by the suspect to a customer in Portland. These two shipments made up a total of over 40 t of coral.

The seized corals have been identified as species in the order Scleractinia, and *Porites*, *Acropora*, and *Pocillopora* spp. (all CITES species). Philippine law specifically forbids exports of all coral and permits are required for importation of CITES species.

On 24 February 2009, Toru Shimoji of Smyrna, Georgia, was fined USD15 000 for the illegal possession of a Snow Leopard *Uncia uncia* (CITES I) carcass and skulls of protected animals, in violation of the *Endangered Species Act*, the *Lacey Act*, and the *Migratory Bird Act*. He was ordered to pay a fine of USD15 000 to the *Lacey Act Reward Account* and placed on probation for two years; all seized wildlife was forfeited.

In December 2007, Shimoji had purchased the Snow Leopard carcass over the internet. The "seller" was in fact a US Fish & Wildlife Service (USFWS) Special Agent working undercover. A search warrant was executed at Shimoji's home where agents discovered over 45 skulls of protected animals in his collection.

On 24 February 2009, Max Moghaddam (also known as Bahmadi Moghaddam Mohammad and Mohammad Moghaddam), of Plantation, Florida, and Bemka Corporation House of Caviar and Fine Foods, of Fort Lauderdale, were sentenced for their involvement in conspiracy, false labelling of export shipments, and the illegal export of internationally protected fish roe during the period July 2005 through April 2007.

Moghaddam and Bemka were convicted in December 2008 for their participation in the export of significant quantities of the roe of the Mississippi Paddlefish *Polyodon spathula* (CITES II), contrary to the *Lacey Act* and the *Endangered Species Act*.

Moghaddam was sentenced to 18 months' imprisonment, fined USD100 000, and ordered to serve a three-year period of supervision upon his release. Bemka was fined USD200 000 and ordered to serve a four-year term of probation. The paddlefish roe were forfeited.

According to the evidence and documents presented, none of the participants in the shipments applied for or secured the necessary

permits, and the Mississippi Paddlefish was falsely described on shipping invoices and Customs documents as bowfin roe. The scheme was detected when a wildlife inspector on duty at Atlanta-Hartsfield Airport became suspicious of the appearance of the fish roe in a shipment awaiting transport to Brussels.

On 19 March 2009, New York State Department of Environmental Conservation (DEC) announced that 18 individuals had been charged following an extensive undercover investigation into the poaching, smuggling and illegal sale of protected reptiles and amphibians. Operation Shellshock uncovered a lucrative, international black market for poaching and selling native, protected New York species through the internet and at herpetological shows. Investigators found thousands of turtles being laundered through middlemen in other States, and shipped overseas for meat and other uses. The species—some 2400 specimens—included: Wood Turtles *Glyptemys insculpta* (classified as Vulnerable by IUCN), Common Snapping Turtles *Chelydra serpentina*, box turtles *Terrapene* spp. (CITES I/II); Blanding's Turtles *Eumeces blandingii*, and two Yellow-spotted Sideneck Turtles *Podocnemis unifilis* (CITES II and classified as Vulnerable by IUCN); Timber Rattlesnakes *Crotalus horridus*, Massasauga Rattlesnakes *Sistrurus catenatus*, Northern Copperheads *Agkistrodon contortrix*, and Eastern Hognose Snakes *Heterodon platyrhinos*.

The investigation, which began in 2007 and was co-ordinated through DEC's Bureau of Environmental Crimes Investigation (BECI), was one of the most extensive undercover operations DEC has ever undertaken. Investigators worked closely with officials from Pennsylvania, New Jersey, Florida, the USFWS, the US Immigration and Customs Service, the New York State Attorney General's Office, Environment Canada and the Ontario Ministry of Natural Resources.

The investigation found that New York's Timber Rattlesnakes and Wood Turtles were shipped out of State and out of the country to support high-end collectors. Thousands of Common Snapping Turtles laundered through a Louisiana turtle farm were illegally shipped to China and poachers were stealing turtle eggs as soon as they were laid. Investigators were able to recover some 33 Massasauga Rattlesnakes from a smuggler from Canada.

As a result of Operation Shellshock, the USFWS and the US Attorney's Office for the Western District of New York are also pursuing *Lacey Act* charges against a Maryland meat processor for the knowing purchase of illegally trapped Common Snapping Turtles, and against a Louisiana turtle farm operator for the knowing purchase of illegally taken Common Snapping Turtle hatchlings and the export of such hatchlings to China.

Pennsylvania authorities have charged six individuals and are continuing their investigation. Canadian officials have charged one individual.

New York prohibits the illegal trade in wildlife; a law enacted in 2006 gives protection to all reptiles and amphibians. The State also bans unlawful possession of protected species.

On 1 May 2009, at US District Court, Camden, New Jersey, Style Craft Furniture Co. Ltd, pleaded guilty to one count of smuggling cribs made from material which contained tropical hardwood Ramin *Gonystylus bancanus* (CITES II). The company was sentenced, according to the terms of a plea agreement, to pay USD40 000 and serve three years of probation. In addition, the corporation must pay for an advertisement in a publication in China, and a second in a publication in the USA, advising other members of the industry of its actions and the consequences.

The company is a manufacturer of wooden furniture for infants, based primarily in China. According to documents filed with the court, the company shipped a container of furniture, including cribs and changing tables, from China to the USA at Port Elizabeth, New Jersey. The invoice that Style Craft Furniture Co. Ltd initially submitted to federal authorities when the shipment arrived stated that the wood was Brazilian Marupa *Simarouba* and New Zealand pine, species which are not protected by international or US law.

After the shipment was detained for further examination, Style Craft Furniture Co. Ltd provided a CITES re-export certificate for the shipment, which authorized the re-export of 1.08³ of Ramin from China on 25 May 2005. Sampling of the shipment indicated that the volume of Ramin contained in the shipment was approximately 6.121³.

The president of Style Craft Furniture Co. Ltd was also charged for the smuggling violation. He has agreed to participate in the District of New Jersey's pretrial diversion programme. Under this agreement, he accepts responsibility for his conduct and agrees to comply with conditions for a period of six months; if he successfully completes the programme, the charge against him will be dismissed.

The government's tools to combat the over-harvesting and exploitation of timber and plants were expanded last year when Congress passed the *Food, Conservation and Energy Act 2008*, which became effective on 22 May 2008. The law amended the *Lacey Act* by extending its protection to a broader range of plants and plant products. With effect from 15 December 2008, the *Lacey Act* makes it unlawful, among other things, to import certain plants and plant products without an import declaration.

USFWS news release, 13 January 2009, www.fws.gov/news/NewsReleases/showNews.cfm?newsId=D5F79DE3-DCDF-E6FD-186B78EE1537BEF5; www.fws.gov/midwest/LawEnforcement/traffic.html; Stuart, B.C. and Papenfuss, T.J. (2002). A New Salamander of the Genus *Parame-sotriton* (Caudata: Salamandridae) from Laos. *Journal of Herpetology*, 36(2):145–148; www.bioone.org/doi/abs/10.1670/0022-1511%282002%29036%5B0145%3AA%20NSOTG%5D2.0.CO%3B2?journalCode=hpet; US Department of Justice, 13 February 2009, www.usdoj.gov/opa/pr/2009/February/09-enrd-125.html; Department of Justice press release, 24 February 2009, www.usdoj.gov/usaof/gan/press/2009/02-24-09b.pdf; US Department of Justice press release, www.usdoj.gov/usaof/fls/PressReleases/090224-01.html, 24 February 2009; New York State Department of Environmental Conservation, 19 March 2009; www.dec.ny.gov/press/52868.html; IUCN 2009. 2009 IUCN Red List of Threatened Species. Version 2009.1. www.iucnredlist.org. Downloaded on 4 June 2009; TRAFFIC North America; US Department of Justice media release: www.usdoj.gov/opa/pr/2009/May/09-enrd-424.htm, 1 May 2009

THE STATUS OF
THE IVORY TRADE
IN THAILAND
AND VIET NAM



DANIEL STILES



Both Thailand and Viet Nam have been identified during the past decade as centres of concern in ivory trade surveys and analyses undertaken for CITES by ETIS (Elephant Trade Information System). Thailand was one of the most important sites of illegal ivory trade at the global level (Martin and Stiles, 2002; Stiles, 2004a; Milliken et al., 2004, 2007) and Viet Nam was shown to have a moderate-sized and largely unregulated ivory market (Martin and Stiles, 2002; TRAFFIC, 2002; Stiles, 2004a). The ETIS analysis produced in 2007 for the 14th meeting of the Conference of the Parties to CITES (CoP14) revealed that Viet Nam had joined a cluster of countries that were identified as playing a secondary, though important, role in the illicit ivory trade which exhibited poor law enforcement effort and potential to become more prominent players in the illicit trade (Milliken et al., 2007) and Thailand was again identified as an important player in the trade. In view of this, TRAFFIC decided to monitor and assess the current status and trends in the ivory industries of Thailand and Viet Nam.

This article summarizes the results of two separate ivory trade surveys carried out by TRAFFIC in Thailand in three phases between late 2006 and early 2008 (Stiles, 2009), and in Viet Nam in April to May 2008 (Stiles, 2008), and aims to contribute to elephant conservation in the region by presenting the status and trends of ivory trafficking in these countries. The two countries' lack of compliance with CITES recommendations concerning the regulation of internal ivory markets or the international trade in ivory is also examined.

BACKGROUND

Asian Elephants *Elephas maximus* and the ivory they carry have for centuries performed an important role in the culture of Thailand and Viet Nam. Since the last half

of the 20th century, the future of wild and domesticated elephant populations in these countries, and elsewhere in South-east Asia, has looked increasingly uncertain. Human population growth, forest fragmentation and clearance, wild capture for domestication and poaching for ivory have all contributed to the decline of wild Asian Elephant populations. The demand for ivory as a result of rapid economic development during the 1970s and 1980s, particularly in eastern Asia, led to rampant poaching and a serious decline in elephants in many Asian and African range countries. Various measures were introduced under CITES in the hope of reducing threats to elephant populations through the regulation of international ivory trade. The first of these was to include the Asian Elephant in Appendix I and the African Elephant *Loxodonta africana* in Appendix II at the first meeting of the Conference of the Parties in 1976. By 1989, the Parties had agreed to transfer *L. africana* to Appendix I owing to the decline of populations, a decision that constituted a ban on all commercial international trade in all elephants and elephant products, including ivory.

The 1989 ban initially served to reduce ivory demand significantly in Europe, the USA and Japan, leading to a decline in elephant poaching in most parts of Africa. There is evidence, however, that the trade ban might have had the opposite effect on Asian Elephants, as Asian ivory traders attempted to replace African ivory with Asian ivory (Stiles, 2004b). In countries with weak law enforcement, such as Cambodia, Lao PDR and Viet Nam, wild elephant numbers for the three countries dropped from an estimated total of 6250 in the late 1980s to 1510 in 2000, a loss of three-quarters of the population in a little over a decade (Santiapillai and Jackson, 1990; Kemf and Santiapillai, 2000; Stiles, 2004b).

No comprehensive wild elephant count has been carried out in Thailand, but estimates suggest the population remained stable at around 1650 from the late 1980s (Santiapillai and Jackson, 1990) to the year 2000 (Kempf and Santiapillai, 2000). Blake and Hedges (2004) are somewhat more optimistic and give a figure for 2004 of between 2500 and 3200 wild elephants, with the caveat that no reliable population estimate is possible in the absence of a systematic count. In late 2005, there were an estimated 3074 domesticated elephants in Thailand (Dublin et al., 2006).

The number of wild elephants in Viet Nam was estimated to be 1500 to 2000 in the late 1980s and 300 to 600 in 1997, with estimates plummeting to 135 in 2000 (Santiapillai and Jackson, 1990; Duckworth and Hedges, 1998; Kempf and Santiapillai, 2000). Recent estimates are even lower, ranging from 59 to 81 (Heffernan and Cuong, 2004). An estimated 165 elephants were in captivity in Viet Nam in late 2005 (Dublin et al., 2006).

The 10th meeting of the Conference of the Parties to CITES (CoP10) in 1997 formulated a specific Resolution on Trade in Elephant Specimens, which was subsequently revised at the 12th and 14th meetings [*Resolution Conf. 10.10 (Rev. CoP12 and CoP14)*]. This Resolution recommended to those Parties in whose jurisdiction there is an

ivory carving industry that is not yet structured, organized or controlled, that comprehensive internal legislative, regulatory and enforcement measures be adopted to: (1) register or license all dealers in all types of ivory products; (2) establish a system to inform non-national buyers that they should not buy illegal categories of ivory intended for export; and (3) introduce recording and inspection procedures to monitor the movement of ivory within respective countries.

In addition, the Resolution also directed the CITES Secretariat to seek information from each Party identified as having sufficient controls over internal ivory “indicating the procedures, action and time frames that are needed in order to establish the measures necessary to properly effect the recommendations regarding internal ivory trade”.

As Parties to CITES, Thailand and Viet Nam are expected to take action to implement these recommendations. With only about 6000 wild and captive elephants in total in the two countries, it is imperative that these recommendations are enforced.

The Asian Elephant is listed as Endangered in the 2009 IUCN Red List of Threatened Species and the population trend is decreasing (IUCN, 2009).

METHODS

The aim of the surveys was to gather as much quantitative data as possible on indicators that reveal the scale and nature of the ivory market and degree of local demand for ivory. The indicators—prices of raw and worked ivory, number of craftsmen engaged in working ivory, and numbers of retail outlets and worked ivory items seen for sale—were determined during visits by the author to ivory craftsmen and workshops, sometimes in the company of a native speaker to act as guide and interpreter. The locations were identified as places where ivory was known or thought to be crafted and/or sold from previous studies and from a review of guidebooks and the internet. Vendors were interviewed to ascertain where they obtained the ivory, how well it was selling in order to assess turnover, the nationality of the main buyers, whether they sold their products over the internet and if they knew where any ivory carving workshops were located. The size and type of ivory item for sale was recorded and the prices paid for different weight and grades of ivory, transport destinations and methods, were collected.

Photographs were taken whenever possible, which helped considerably in determining the number of items, especially when these proved too numerous to record on site.

The presence and type of ivory substitutes were also noted (mammoth ivory, resins, bone, etc.). The word ivory in this report always refers to elephant ivory unless otherwise stated.

These data were analysed and the number, types and prices of ivory items were broken down for display in tables to allow for standardized comparisons of the indicators between place and time. The retail prices for ivory items are based on quotes given on first enquiry rather than on any negotiated price, or in the case of raw

ivory they sometimes refer to the price the carver claimed to have paid. The exchange rate varied slightly during the survey period, but in all instances in this report the rate used in Thailand is THB35=USD1 (December 2006) and in Viet Nam VND16 100=USD1 (May 2008).

In Thailand, field research was carried out in Bangkok, Chiang Mai and the Phayuha Kiri/Uthai Thani area south of Nakhon Sawan from 2 to 23 December 2006 and again in Bangkok from 16 to 25 February 2007. The results of a separate ivory market survey carried out by TRAFFIC in January 2006 in Mae Sai on the Thai-Myanmar border (Shepherd and Nijman, 2008) has been included in this report. A follow-up ivory monitoring survey was carried out in Bangkok, Chiang Mai and Nakhon Sawan area from 14 January to 9 February 2008 to evaluate actions taken by the Thai Government during the intervening 12 months.

In Viet Nam, the following locations were surveyed between 4 April and 4 May 2008: Ho Chi Minh City, Vung Tau, Phu Quoc island, Ha Tien, Nha Trang, Hué, Ha Noi and Ha Long City.

IVORY REGULATION

Thailand: Thailand’s ratification to CITES entered into force on 21 April 1983. The CITES Management Authority (MA) is the Department of National Parks, Wildlife and Plant Conservation (DNPWP) within the Ministry of Natural Resources and Environment (MoNRE). Wild elephants are classified as protected animals. The internal trade in Thai and foreign wild elephants and their products is illegal according to the *Wild Animal Reservation and Protection Act* of 1992 (*WARPA*) which, along with the *Wild Elephant Protection Act* of 1921, prohibit the killing of wild elephants or their capture without official permission from the government.

Domesticated elephants, however, come under the *Draught Animal Act* of 1939, which does not ban the trade of domesticated elephants nor the possession or sale of ivory from domesticated elephants (Lair, 1997). Since government officers are generally unable to distinguish between domesticated and wild elephant ivory, the government cannot always successfully prosecute the illegal use of wild or illicitly imported ivory. The majority of legal raw ivory in Thailand comes from domesticated elephants that have had their tusks pruned.

The possession of an illegally imported wildlife specimen is not an offence in itself under *WARPA*. In order for a prosecution to be possible, the accused must be shown to have been personally responsible for an illegal import, export or re-export. This, of course, may not be easy to demonstrate, particularly if the specimen in question has been in the country for some time or if the owner has changed (CITES, 2006a).

The Government of Thailand is working on a revision of *WARPA* in order to improve domestic wildlife management and implement international agreements such as CITES, but the CITES MA of Thailand could not confirm when the new Act will be finalized (CITES, 2007).

Viet Nam: Viet Nam's accession to CITES came into force on 20 April 1994. The CITES MA for Viet Nam is the Forest Protection Department in the Ministry of Agriculture and Rural Development. A series of government laws and decrees prohibit the hunting of elephants and other listed wild species (Prime Minister's directive 134/TTg, 1960; Council of Minister's decree 39/CP, 1963) and the use, trade and transport of products derived from them (Ministry of Forestry decision number 276/QD, 1989; Council of Minister's decree 18/HDBT, 1992; Prime Minister's directive 359/TTg, 1996; Government Decree No. 48/2002/ND-CP, 2002; Government Decree 82/2006/ND-CP, 2006). The elephant is classed in category IB which means there is a complete ban on all trade of the species or its products. In July 2000, the Revised Criminal Code set out regulations for the prosecution of cases of illegal exploitation of rare and precious wild species, including elephants.

RESULTS

Thailand

Sources and prices of raw ivory: Ivory seizures in various parts of Africa and Asia, including Thailand, in recent years appear to have reduced severely the availability to craftsmen of African ivory in raw form. Several ivory craftsmen and retail vendors stated in December 2006 to February 2008 that there was a raw ivory shortage, and greatly increased prices of raw ivory since 2001 support this assertion. It is likely that those involved in smuggling African raw ivory to Thailand have temporarily halted activities in the hope that vigilance will decrease and they can resume operations. The scarcity of African ivory has caused the wholesale price of tusk tips weighing less than one kilogramme obtained from domesticated elephants to rise considerably from less than USD100/kg in 2001 to USD350–1200/kg in early 2008.

Tusk tips are solid ivory and although small in size are more expensive by weight than small whole tusks that include the hollow base, which usually makes up about one-third the length of a tusk. Small tusks less than five kilogrammes cost from USD286–429/kg in early 2008, up from USD91–182/kg in early 2001 (Martin and Stiles, 2002). No price data for tusks weighing 5–10 kg could be obtained because few or none seem to be on the market. Raw ivory prices in Thailand increased on average over 300% between 2001 and 2008.

Data were not available to indicate whether this shortage of African ivory has led to increased poaching of Asian Elephants to replace supply.

Ivory workshops and craftsmen: From an estimated minimum of 100 ivory craftsmen active in Thailand in 2001 (Martin and Stiles, 2002), there were estimated to be no more than 60 in early 2008. However, this figure includes about 45 carvers previously unreported that were found during this survey to be involved in the manufacture of jewellery, belt buckles and knife/sword handles in at least eight workshops in Uthai Thani, one in Chai Nat and three in Bangkok. This segment of the industry seems to be expanding, based on the fact that one of these workshops visited in 2003 had increased its employment from two to 12 craftsmen in less than five years, and many more retail outlets in the locations surveyed carried their merchandise than in 2001.

The former ivory carving centre of Phayuha Kiri appeared to be considerably less active than previously as a result of ivory seizures by the government and efforts made by the Thai authorities with carvers to reduce illegal ivory manufacturing and trading. The scarcity of raw ivory may also be reducing ivory carving activity.

Retail outlets and number of items for sale:

The apparent change in the number of outlets observed to be selling ivory in Bangkok, Phayuha Kiri and Chiang Mai between 2001 and 2006/2007 (see Table 1) could simply be artefacts of sampling differences rather than any real increase or decrease in outlet numbers. In 2008, three more of the outlets in Phayuha Kiri had ceased selling ivory, though three new outlets were also found, leaving the total at eight. The three additional outlets were probably also selling ivory in 2006 and simply were missed as they were in a different part of the main street from the others and that street section was not surveyed in 2006. Sixty-three additional outlets selling ivory were found in Bangkok in 2008 compared to 2006/2007, indicating that controls over the internal ivory market have been inadequate.

More apparent was the lower number of ivory pieces seen for sale in 2006/2007. Bangkok had 70% fewer pieces, Phayuha Kiri 82%, and ivory items in Chiang Mai were reduced by 77%. Overall, there were almost 77% fewer ivory items seen for sale in the three localities in 2006/2007 than in 2001. The 2008 survey showed, however, that the quantities of worked ivory had increased from 2006/2007 in the sampled outlets by 25% in



D. STILES

PHAYUHA KIRI TOWN IN CENTRAL THAILAND HAS BEEN A MAJOR IVORY MANUFACTURING CENTRE FOR DECADES. THE AVERAGE SIZE OF ITEMS HAS DECREASED BECAUSE OF A RAW IVORY SHORTAGE.



THAIS AND CHINESE ARE THE MAIN BUYERS OF IVORY IN THAILAND.

PHOTOGRAPHS: D. STILES



ALTHOUGH THE MAJORITY OF IVORY IN VIET NAM WAS FOUND IN HO CHI MINH CITY (ABOVE), THE QUALITY OF CARVING WAS LOWER THAN THAT FOUND IN HA NOI.

Bangkok, 22% in Chiang Mai and 24% in Uthai Thani. Only Phayuha Kiri showed a continuing decrease in the total number of ivory items displayed. Whether the cause was lower demand, lack of raw material to manufacture new pieces or vendor reaction to Thai Government actions, or a combination of factors, cannot be ascertained without more detailed research. However, increased raw ivory prices and the high turnover in ivory pieces seen in shops suggest that lower demand was not a significant factor.

Also significant is the finding that the average size of ivory pieces for sale has been steadily decreasing, and therefore the total weight of ivory seen for sale decreased dramatically between 2001 and 2008. This supports the hypothesis that lack of raw material is a major factor in the reduction of worked ivory seen for sale.

Some 69 additional outlets in Bangkok, Chiang Mai, and Nakhon Sawan area carrying 3125 ivory items were found in 2008. At least 50, if not all, of these outlets did not exist or were not selling ivory in 2006/2007.

Buyers: In past years, the main buyers of Thai worked ivory have been Europeans, Americans, ethnic Chinese (from Malaysia, Singapore, Taiwan, Hong Kong and mainland China) and Japanese, in that order (Luxmoore, 1989; Martin and Stiles, 2002). Information from vendors during this survey, and observations of business cards displayed in glass counters selling ivory, suggest that Thai citizens, both ethnic Thai and Chinese Thai, are beginning to buy more worked ivory. The ethnic Thais tend to purchase the amulets depicting Buddha/Guan Yin (a female Buddhist deity) and good luck charms, including Buddha figurines, while the Chinese Thais buy Chinese style figurines (e.g. Long Life, Happy Buddha, etc.), chopsticks, and mounted polished tusks. Without a detailed study it is not possible to say what proportion of the ivory market Thais are now buying.

Market turnover: Worked ivory was selling at a fairly brisk rate, particularly the small, less expensive items. Several shops in Chatuchak Market and along the Sukhumvit-Silom-Suriwongse Roads, and one in Chinatown in Bangkok, were visited in December 2006, February 2007 and January to February 2008. Much of the ivory had been sold in Chatuchak and the Chinatown shops, but less had been sold in the Sukhumvit/Silom/Suriwongse shops. There was high turnover of tusk tips seen for sale in December 2006 when the same outlets were surveyed again in February 2007. Only two tiny tusk tips were found in 2008. The turnover assessment was based on photos of ivory displays and a comparison of the total number of pieces during the different surveys in the respective localities. To obtain valid quantitative data, a long-term study would be required in order to observe sales and replacement rates.

Trends: There was significantly less ivory for sale in fewer shops and a smaller number of ivory craftsmen in 2006/2008 than in 2001, indicating that the scale of the Thai ivory market has greatly diminished in recent years. However, the great increase in the price of raw ivory suggests that ivory demand persists and that supply is a limiting factor to market scale. If more raw ivory were to become available, the market could again increase in size.

Viet Nam

Sources and prices of raw ivory: Up to the early 1990s, Vietnamese ivory craftsmen used exclusively Asian Elephant ivory from Viet Nam and neighbouring Lao PDR and Cambodia. Before 1990, there were few tourists and the low demand for worked ivory could be supplied by domestic elephants. In 1990 there were an estimated 1459 to 1631 wild elephants in the country (Tuoc and Santiapillai, 1991). Economic liberalization and an increase in tourism raised both local and visitors' demands for worked ivory, which resulted in heavy poaching. By the late 1990s Vietnamese ivory traders and carvers were looking for new supplies of ivory, and Russia and Angola became sources.

During the conflict in Viet Nam in the 1960s and early 1970s, the Soviet Union was a close ally of North Viet Nam. A legacy of this alliance is the presence of

Place	No. of outlets with ivory		No. of pieces	
	2001	2006/ 2007	2001	2006/ 2007
Bangkok	164	151	38 510	12 517
Phayuha Kiri	12	8	39 649	7 611
Chiang Mai	18	26	10 020	2 323
Uthai Thani	n/a	8	n/a	361
Mai Sae	n/a	8	n/a	446
Total	194	201	88 179	23 258

Table 1. Retail ivory outlets and items seen in Thailand in 2001 and 2006/2007.

2001 source: Martin and Stiles, 2002

Vietnamese businessmen with enterprises in Moscow and elsewhere in present-day Russia who began exporting Russian mammoth ivory to Viet Nam in the late 1990s (ivory craftsman, pers. comm. to D. Stiles, 2002). Vietnamese people have been working in Angola since the conflict with South Africa ended in the early 1990s. Some workers brought tusks or cut ivory pieces with them when they returned home for visits (Martin and Stiles, 2002; Stiles, 2004a). That practice seems to have ceased with increased vigilance by Vietnamese law enforcement authorities, especially after a large African ivory seizure was made in Han Noi in 2004 (TRAFFIC, 2005). Informants in 2008 all said that most of the raw ivory used currently originated in Lao PDR, with a few pieces coming from domestic elephants or Cambodia. Since 2004 it appears from seizures data that Viet Nam has served only as a transit country for smuggled African ivory en route to China, where prices offered for the ivory are higher, though this could change if domestic ivory demand continues to rise. Table 2 presents a summary of raw ivory prices in 2008.

These prices were significantly higher than those seen in earlier years. Martin (1992) reported that in 1990–91 raw ivory varied in price from USD100–200/kg, depending on availability and the current rate of retail sales. A carver in Ha Noi told this author that he paid USD100/kg for raw ivory in early 1995, but that the price rapidly increased that year, which prompted him to retire from ivory carving. In 2001, most good raw ivory cost between USD300 and 500/kg (Martin and Stiles, 2002). In 2000, mammoth ivory was selling for USD300/kg (TRAFFIC, 2002).

In early 2008, in Ho Chi Minh City, a 520 g solid section of cut tusk was priced at USD769/kg and a section of cut tusk weighing 1.7 kg cost USD1059/kg. Two tusk tips weighing 150 g and 200 g, respectively, were priced at an equivalent per kg cost of USD1653–1863/kg. These were asking prices and the prices could have been negotiated down.

Ivory workshops and craftsmen: The most important ivory working area in Viet Nam is in and around Ha Noi, especially in Ha Tay Province. About 10 ivory craftsmen were found in Nhi Khe, Phu Khe and Du Du villages. One workshop was found in Ha Noi, with at least one craftsman, but he declined to state whether he worked with anyone else. Initial information about a network of ivory craftsmen, middlemen and dealers was gathered, many of them family related, but more research would be needed to unravel the full history, interrelationships and workings of the network. Parts of it seem to go back at least three generations, and there were signs that not all of the members co-operate with, or even know, one another. A number of shop owners and middlemen who deal worked ivory all use the same craftsmen both as suppliers, and as outsourced artisans.

One ivory workshop visited in Nghe Can village, about 10 km from Hué, employs two craftsmen and produces many of the painted screens made from ivory and bone that can be found in Ho Chi Minh City and Ha Noi. It also makes small Buddha carvings and other

figurines. Most of the items produced here are made of buffalo bone.

Informants in Ho Chi Minh City reported that there were ivory carvers in and around Ho Chi Minh City, but no one would provide an exact location. For example, an outlet selling ivory in An Dong market in District 5 said they had their own workshop, but would not allow a visit. Likewise, an ivory speciality shop next to An Dong market and a shop in District 1 said the same thing. This repeated the experiences of previous surveys (Martin, 1992; TRAFFIC, 2002; Martin and Stiles, 2002). There may also be craftsmen in Ban Me Thuot, according to informants, but the city was not visited.

The number of craftsmen working ivory in 2008 was one-third to one-fourth the number who were working in 1990, which was estimated to be 63 to 83 (Martin, 1992), indicating that the scale of the ivory market in Viet Nam has decreased considerably since the CITES international ivory trade ban and the formulation of more robust Vietnamese legislation. The number in 2008, at least 17, was about the same as in 2001, but craftsmen were working more ivory in 2008 than in 2001/2002.

Retail outlets and number of items for sale: A total of 669 outlets of various types that attract large numbers of national and international potential ivory buyers were surveyed in eight localities in Viet Nam. Of these, 73 (11%) had ivory for sale, totalling 2444 items (Table 3).

In 2001, Ho Chi Minh City had 37 outlets selling 2262 ivory items. In 2008, the outlets had increased to 49 while the number of ivory items found had decreased to 1776. Ha Noi had three fewer outlets in 2008 than in 2001 (13 and 10 respectively), and two of those had only one item each in 2008. A survey in 2002 found only eight outlets

Location	Weight and price in USD/kg	
	<1 kg	1–3 kg
Ho Chi Minh City	769–1863	1059
Ha Noi	787–807	500–870
Hué	745	1242

Table 2. Raw ivory prices in Viet Nam in 2008.

Place surveyed	No. outlets	No. outlets with ivory	No. of items
Ho Chi Minh City	251	49	1776
Vung Tau	17	0	0
Phu Quoc	26	1	4
Ha Tien	33	4	113
Nha Trang	27	0	0
Hué	59	8	141
Ha Noi	227	10	407
Ha Long City	29	1	3
Total	669	73	2444

Table 3. Number of ivory outlets and items, Viet Nam, 2008.

in Ha Noi selling ivory (Stiles, 2004a), so little has changed in that respect to 2008. The number of items seen for sale decreased from 777 to 407. Overall, the number of items for sale had decreased by 28% between 2001 and 2008.

Buyers: Informants said that most buyers of worked ivory were visitors from China and Thailand, though local Vietnamese bought ivory, particularly the smaller religious pendants and figurines. Chinese and Thai buyers often commission the manufacture of high quality figurines by craftsmen through middlemen or shop owners. It can take up to two months to make a figurine; buyers are often businessmen who travel regularly to Viet Nam but finished items are also sent to buyers by post. Visiting Vietnamese-Americans were also said to buy ivory pieces. European tourists bought small amounts, mainly jewellery.

Market Turnover: Vendors reported high turnover of smaller items aimed at the local market, such as amulets depicting Buddha/Guan Yin, and fairly good sales of jewellery, especially bangles. Some of the more expensive items have remained on shelves for years. Turnover is impossible to gauge without long-term observation in the ivory workshops, as commissioned pieces, mainly figurines, are sold without entering a retail outlet. Craftsmen reported increased ivory carving activity in 2008 compared to 2001/2002.

Trends: Compared to other markets globally, the scale of the ivory market in Viet Nam remains modest. Although there were 28% fewer worked pieces seen for sale in Ho Chi Minh City and Ha Noi in 2008 than in 2001, the great increase in prices of raw and worked ivory, the larger number of outlets selling ivory, and the observed upsurge in activity by individual craftsmen of working ivory between 2001 and 2008 all strongly suggest that demand for ivory is rising. Less ivory on the shelves of outlets may in fact be the result of increased sales coupled with decreased availability of raw material to enable replacement. No “under-the-counter” stocks were apparent and although carvers and middlemen had stocks that were not displayed, they were few in number. A contributing factor to fewer pieces seen in shops could be the fact that more buyers order items directly from craftsmen through middlemen, or commission items on the internet, so the ivory never enters a retail outlet.

DISCUSSION AND CONCLUSIONS

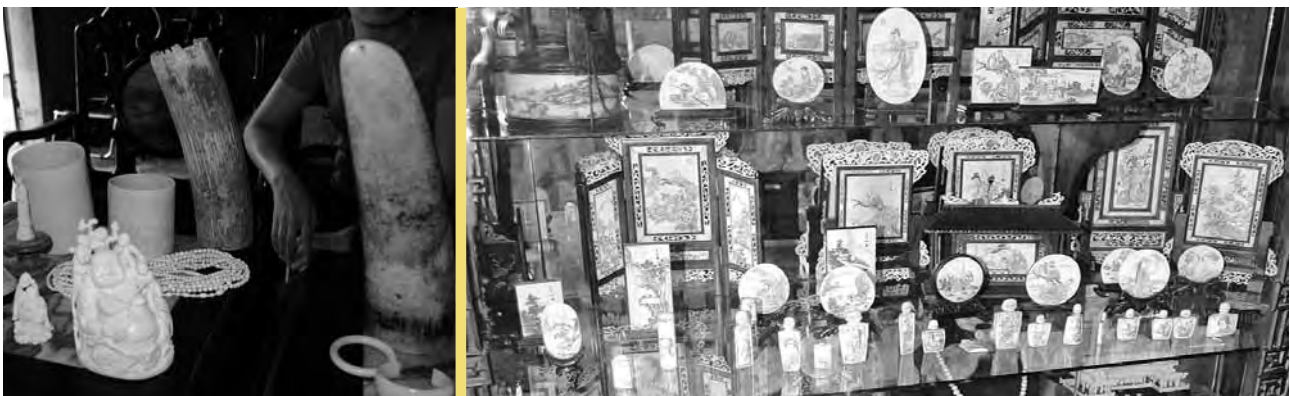
Compliance with CITES

Thailand: In recent years the CITES Standing Committee has noted that the Thai Government has been unable to comply with recommendations concerning the regulation of internal ivory markets or the international trade in ivory as specified under *Resolution Conf. 10.10 (Rev. CoP12 and Rev. CoP14)* on Trade in Elephant Specimens (CITES, 2004; CITES, 2006a). In May 2006, the CITES Secretariat, together with an officer from INTERPOL, noted that ivory was readily available for sale in Bangkok and that it appeared that the reduction in displayed ivory around the time of CITES CoP13 in October 2004 was only temporary (CITES, 2006b).

In early 2007, Thailand submitted a report to the CITES Secretariat in which it summarized measures that had been taken in the recent past to address the problems of elephant and ivory trade, and illegal wildlife trade in general (CITES, 2007). The report also included measures that the Government plans to undertake in the short and long term to control illegal wildlife trade, both at the national level and within the context of Thailand’s participation in the ASEAN Wildlife Enforcement Network (ASEAN-WEN). As such, it is the most up-to-date self-assessment by Thailand of its compliance with *Resolution 10.10 (Rev. CoP12)* and its efforts to control the internal trade in ivory.

In terms of complying with *Resolution Conf 10.10 (Rev. CoP12 and Rev. CoP14)*, Thailand has issued a notification from the Ministry of

LEFT: THE RAW IVORY IDENTIFIED IN VIET NAM WAS REPORTED BY TRADERSTO COME MAINLY FROM ELEPHANTS FROM LAO PDR, WITH A SMALL PORTION FROM VIET NAM AND CAMBODIA. SMALL AMOUNTS OF MAMMOTH IVORY WERE ALSO FOUND. RIGHT: PAINTED PLAQUES PRODUCED MAINLY AROUND HUÉ ARE POPULAR ITEMS THROUGHOUT VIET NAM. THEY ARE MADE ON IVORY OR BONE, WHICH CAN BE DIFFICULT TO TELL APART.



Commerce under the *Commercial Act B.E. 2499* (1956) requiring “concerned entrepreneurs” to apply for registration (CITES, 2007). The CITES MA of Thailand provided additional detail regarding 48 outlets that have already registered with the Ministry of Commerce’s Department of Business Development. Co-operation has also been sought from the traders to support the government’s work to curb illegal ivory trade, including the exchange of information that will lead to further investigation and identification of the hotspots of illegal smuggling to and from Thailand (Thailand CITES MA, *in litt.* to TRAFFIC Southeast Asia, 1 May 2007).

The Thai authorities have begun liaising with ivory retail outlets as part of the registration process and a general public awareness campaign. This campaign was reported to have begun in December 2006, aimed at hotels, local markets and airports to build public understanding of illegal wildlife trade (CITES, 2007), though no signs of this campaign were seen during this investigation.

It is understood that in addition to the ongoing registration process for entrepreneurs, all businesses dealing in ivory and registered as a ‘Company’ under the definition of the Ministry of Commerce will have to provide an inventory of their current stock. The CITES MA of Thailand is currently working to extend this provision to all individuals dealing with ivory, to enable comprehensive recording and inspection procedures to monitor the flow of ivory in Thailand (CITES MA of Thailand, pers. comm. to TRAFFIC Southeast Asia, 2007).

In addition, Thailand’s report to CoP14 included a list of complementary activities to bolster general implementation and enforcement of CITES, including the control of domestic ivory markets and trade in elephant products.

Viet Nam: Viet Nam has enacted a series of directives and decrees that aim to structure and control the internal ivory market so that it complies with CITES *Res. Conf. 10.10 (Rev. CoP14)*. Although the possession and sale of raw and worked ivory is prohibited, there appears to be an unwritten understanding between government and shop-owners that retail outlets that carried ivory before the Council of Minister’s decree 18/HDBT 1992 ivory trade ban are allowed to sell off stock that existed at that time, a means used by some shop-owners to replace worked ivory stock that has been sold with recently made ivory items, in contravention of Vietnamese law. Also, the government has not implemented the recommendation to “*establish a nationwide procedure, particularly in retail outlets, informing tourists and other non-nationals that they should not purchase ivory in cases where it is illegal for them to import it into their own home countries*” [CITES *Res. Conf. 10.10 (Rev. CoP14)*]. According to the 2007 ETIS report, Viet Nam has not fulfilled its obligation as a Party to CITES to submit annual reports on elephant product seizures to ETIS. The 1989–2007 Viet Nam ETIS record is highly erratic and incomplete (Milliken *et al.*, 2007).

Overall Assessment

Thailand: Although the ivory market has decreased considerably in scale in recent years, addressing the still sizeable unregulated ivory trade in the country remains a priority. The most recent available data relating to open markets and observable trade rank Thailand third in the world in ivory market size, behind China/Hong Kong and the USA (Martin and Stiles, 2008). The Uthai Thani area is a growing centre of ivory manufacturing, while the former principal centre, Phayuha Kiri, is decreasing in activity. The Thai Government has begun to carry out various measures to control the ivory industry, but thus far the results have not been particularly effective. The reduction in market scale appears at least in part to be due to a shortage of raw ivory rather than government action.

Viet Nam: The Vietnamese ivory industry is still at only a modest level, but there are worrying signs of increased use of ivory, mainly as a result of economic development and rising numbers of foreign visitors. Vietnamese craftsmen use ivory mainly from Lao PDR, Viet Nam and Cambodia. The government has taken steps to control the retail sale of worked ivory and the trafficking of raw ivory, but permitting the sale of worked ivory stocks obtained before the 1992 Council of Minister’s decree 18/HDBT ivory trade ban functions as a means by which more recently manufactured ivory can be ‘laundered’.

RECOMMENDATIONS

Thailand: International

- Thailand should continue its leadership role with respect to the ASEAN Wildlife Enforcement Network (ASEAN-WEN), focused on efforts to control the illicit international trade of wildlife, including live elephants and ivory.
- Thailand should make a concerted effort to comply with the requirements and recommendations contained in CITES resolutions; specifically, the implementation of the requirements for internal trade demanded under *Resolution Conf. 10.10 (Rev. CoP14) Trade in Elephant Specimens*. In addition, Thailand should ensure accurate and timely reporting to ETIS, including updates, to verify that there have been no seizures during reporting periods.

National

- The *Wild Animal Reservation and Protection Act* of 1992 should be comprehensively amended to include specific legislative provisions relating to the control of internal and international trade in live elephants and other elephant products, particularly ivory. Loopholes in existing law, such as allowing the legal commercialization of ivory obtained from domesticated elephants, should be closed and the CITES requirements for internal trade in ivory articulated in *Resolution Conf. 10.10 (Rev. CoP14)* should be codified.

- Thai Customs Department officials should be trained in the identification of ivory and use of comprehensive methods for scrutinizing CITES permits for accuracy and compliance in order to reduce the likelihood of fraudulent documents being used to legalize illicit wildlife exports. Customs officials should ensure that imported items at airports and ports correspond correctly with import declarations in the expectation that more illegal raw ivory shipments from Africa will be attempted in the future.
- Thai authorities knowledgeable about ivory trade issues and competent in ivory identification should visit the workshops and outlets dealing with ivory and confiscate those items whose age and provenance cannot be proven to be in compliance with CITES and national regulations.
- The Thai Government should ensure that Thailand's National Task Force, comprising multiple agency jurisdictions, linked to ASEAN-WEN, is able to carry out the continuous monitoring of elephant and elephant product trade as one of its priorities.

Viet Nam:
International

- Viet Nam should fully implement the recommendations contained in CITES *Resolution Conf. 10.10 (Rev. CoP14)* Trade in Elephant Specimens.
- Viet Nam's CITES MA should dedicate staff to monitor and record seizures of all elephant specimens, particularly ivory, and make timely and accurate reports to ETIS.
- Relevant government agencies, including CITES, Forest Protection Department, Customs and police, should continue its participation in ASEAN-WEN and increase efforts to control the illicit trafficking of ivory and other wildlife products to and from other countries.

National

- The government should enact or amend legislative directives to stipulate clearly that the purchase, possession, trade, transport and offer for sale of raw and worked ivory is prohibited, regardless of the date of acquisition or manufacture.
- Viet Nam should clearly identify and assign the government authorities responsible for enforcing laws that result in border seizures and internal confiscations of illegal wildlife products, including ivory, and encourage these authorities to act.
- Measures should be developed by government to enhance training and motivation of staff responsible for enforcing wildlife trade laws.
- Offenders contravening wildlife trade laws should be prosecuted and penalized according to the law.
- All ivory seen for sale in retail outlets should be confiscated by the government and destroyed to prevent the ivory re-entering the market.
- The government might consider donating the finer, more artistic pieces to museums around the country with strict prohibitions about their commercial use, other than display.



D. STILES

CHATUCHAK WEEKEND MARKET IN BANGKOK WAS A MAJOR OUTLET FOR THE SALE OF WORKED IVORY. MORE THAN 2600 IVORY ITEMS WERE FOUND THERE.

IN THAILAND THERE IS A GROWING CRAFT OF PRODUCING BELT BUCKLES AND KNIFE-HANDLES WITH IVORY. MOST IVORY WORKSHOPS ARE IN THE UTHAI THANI AREA.



D. STILES

ACKNOWLEDGEMENTS

The staff of the TRAFFIC Southeast Asia office provided essential information and backup support that assisted the project greatly, in particular Azrina Abdullah, Chris Shepherd and James Compton. Staff of TRAFFIC's Greater Mekong Programme office in Ha Noi also helped significantly in backup and field work in the Ha Noi area, particularly Sulma Warne, Nguyen Thi Bich Hien and Chris Turton. Tom Milliken contributed with elephant product trade information.

REFERENCES

Blake, S. and Hedges, S. (2004). Sinking the flagship: the case of forest elephants in Asia and Africa. *Conservation Biology* 18:1–12.

CITES (2004). Control of internal ivory trade. SC50 Doc. 21.1 (Rev.1), 50th meeting of the CITES Standing Committee, Geneva, Switzerland, 15–19 March.

CITES (2006a). Enforcement matters. SC54 Doc.38, 54th meeting of the CITES Standing Committee, Geneva, Switzerland, 2–6 October.

CITES (2006b). Control of trade in African Elephant ivory. SC54 Doc. 26.1 (Rev. 1), 54th meeting of the CITES Standing Committee, Geneva, Switzerland, 2–6 October.

CITES (2007). *Interpretation and implementation of the Convention. Species trade and conservation issues. Elephants: Trade in Elephant Specimens.* 14th meeting of the Conference of the Parties, The Hague (Netherlands), 3–15 June 2007. CoP14 Doc. 53.1, Annex 2.

Dublin, H., Desai, A., Hedges, S., Vié, J-C., Bambaradeniya, C. and Lopez, A. (2006). *Asian Elephant Range States Meeting.* IUCN/SSC, Gland, Switzerland.

Duckworth, J.W. and Hedges, S. (1998). *A Review of the Status of Tiger, Asian Elephant, Gaur and Banteng in Vietnam, Lao, Cambodia and Yunnan Province (China), with Recommendations for Future Conservation Action.* WWF Indochina Programme, Ha Noi, Viet Nam.

- Heffernan, P.J. and Cuong, T.V. (2004). *A Review of the Conservation Status of the Asian Elephant in Vietnam*. Indochina Asian Elephant Programme, Fauna & Flora International, Cambridge, UK.
- IUCN (2009). *2009 IUCN Red List of Threatened Species*. Version 2009.1. www.iucnredlist.org. Downloaded on 1 June 2009.
- Kemf, E. and Santiapillai, C. (2000). *Asian Elephants in the Wild*. WWF, Gland, Switzerland.
- Lair, R. (1997). *Gone Astray: The Care and Management of the Asian Elephant in Domesticity*. FAO, Bangkok, Thailand.
- Luxmoore, R. (1989). The ivory trade in Thailand. In: The ivory trade and the future of the African Elephant. Prepared for the seventh meeting of the Conference of the Parties to CITES, Lausanne. Ivory Trade Review Group, Oxford, UK. Unpublished report.
- Martin, E. (1992). Observations on wildlife trade in Viet Nam. *TRAFFIC Bulletin* 13(2):61–67.
- Martin, E. and Stiles, D. (2002). *The Ivory Markets of South and South East Asia*. Save the Elephants, London, UK.
- Martin, E. and Stiles, D. (2008). *The Ivory Markets of the USA*. Care for the Wild International, London, UK.
- Milliken, T., Burn, R.W., Underwood, F.M. and Sangalakula, L. (2004). *Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: A Report to the 13th Meeting of the Conference of the Parties*. CoP13 Doc. 29.2, CITES, Gland, Switzerland.
- Milliken, T., Burn, R.W., and Sangalakula, L. (2007). *The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: A Report to the 14th Meeting of the Conference of the Parties*. CoP14 Doc. 53.2, Annex 1; CITES, Gland, Switzerland.
- Santiapillai, C. and Jackson, P. (1990). *The Asian Elephant. an Action Plan for its Conservation*. IUCN, Gland, Switzerland.
- Shepherd, C.R. and Nijman, V. (2008). *Elephant and Ivory Trade in Myanmar*. TRAFFIC Southeast Asia, Petaling Jaya, Selangor, Malaysia.
- Stiles, D. (2004a). Update on the ivory industry in Thailand, Myanmar and Viet Nam. *TRAFFIC Bulletin* 20(1):39–43.
- Stiles, D. (2004b). The ivory trade and elephant conservation. *Environmental Conservation* 31(4):309–321.
- Stiles, D. (2008). *An Assessment of the Illegal Ivory Trade in Viet Nam*. TRAFFIC Southeast Asia. 27 pp+i–vii. Available from: www.traffic.org/home/2009/2/16/elephants-under-threat-as-illegal-ivory-price-soars-in-viet.html.
- Stiles, D. (2009). *The Elephant and Ivory Trade in Thailand*. TRAFFIC Southeast Asia. 62 pp+i–viii. Available from: www.traffic.org/home/2009/6/19/elephant-size-loopholes-sustain-thai-ivory-trade.html.
- TRAFFIC (2002). *An Assessment of the Illegal Trade in Elephants and Elephant Products in Viet Nam*. TRAFFIC International. TRAFFIC Online Report Series No. 2.
- TRAFFIC (2005). Seizures and prosecutions. *TRAFFIC Bulletin* 20(2):83–88.
- Tuoc, D. and Santiapillai, C. (1991). The status of elephants in Vietnam. *IUCN-WWF Asian Elephant Specialist Group Newsletter* 7, 2–8.

Daniel Stiles, Ph.D., independent consultant for TRAFFIC Southeast Asia, Diani Beach, Kenya.
E-mail: kenyan@roadrunner.com

TRAFFIC MAILING DATABASE FORM

PLEASE COMPLETE THE FOLLOWING FORM IF YOU ARE SUBSCRIBING TO THE TRAFFIC BULLETIN FOR THE FIRST TIME, YOUR DETAILS HAVE CHANGED OR IF YOU PREFER TO RECEIVE THE TRAFFIC BULLETIN BY ELECTRONIC MAIL ONLY.

Title (Dr/Mr/Mrs/Ms/Other) _____ Reference No. _____
 (Please refer to envelope label)

Organization _____
 (Please spell out acronyms in full)

Name _____ Position _____

Address _____

Post/Zip code _____ Country _____

Website _____ E-mail _____

Tel. Number _____ Fax Number _____

- Please type 'X' if your contact details have changed.
- Please type 'X' if you wish to receive a copy of the *TRAFFIC Bulletin* in electronic format only.
- Please type 'X' if you wish to **CANCEL** your subscription to the *TRAFFIC Bulletin*.

Nature of business (type 'X' in square brackets):

- | | |
|--|--|
| <input type="checkbox"/> education | <input type="checkbox"/> CITES Management Authority |
| <input type="checkbox"/> university | <input type="checkbox"/> CITES Scientific Authority |
| <input type="checkbox"/> library | <input type="checkbox"/> conservation organization |
| <input type="checkbox"/> enforcement agency | <input type="checkbox"/> media/communications |
| <input type="checkbox"/> government authority | <input type="checkbox"/> commercial |
| <input type="checkbox"/> non-governmental organization | <input type="checkbox"/> individual |
| <input type="checkbox"/> international government organization | <input type="checkbox"/> other <i>Please specify</i> _____ |

Please specify area of interest (type 'X' in square brackets):

- | | |
|---|--|
| <input type="checkbox"/> animal species threatened by trade | <input type="checkbox"/> medicinal plant trade |
| <input type="checkbox"/> plant species threatened by trade | <input type="checkbox"/> traditional medicine |
| <input type="checkbox"/> fisheries trade | <input type="checkbox"/> wildlife trade impacts on priority ecoregions |
| <input type="checkbox"/> timber and wood products trade | <input type="checkbox"/> international treaties and wildlife trade |
| <input type="checkbox"/> livelihoods | <input type="checkbox"/> other <i>Please specify</i> _____ |

I would like to contribute towards the production of the *TRAFFIC Bulletin* or other important activities of TRAFFIC.

I enclose a cheque/international money order for _____ made payable to TRAFFIC International.

GIFT AID DECLARATION

Please type 'X' in box below if you wish TRAFFIC to reclaim the tax on your gift (if you are a UK taxpayer).

I would like TRAFFIC to reclaim the tax on this donation, and any further donations I make from the date of this declaration until I notify you otherwise.

Signature: _____ Date: _____

GUIDELINES FOR CONTRIBUTORS

Papers about wildlife trade issues are invited for consideration by TRAFFIC International, the publisher of the *TRAFFIC Bulletin*, providing the material is unpublished and not under consideration for publication elsewhere. Contributions can be in the form of feature articles (which should not usually exceed 7000 words, excluding tables and references), Short Communications (up to 3000 words), and news items (up to 2000 words).

Referees and the Editor judge each submitted manuscript on data originality, accuracy and clarity. A minimum of two reviewers are selected by TRAFFIC International for feature articles and Short Communications, with suggestions from authors welcome. The author will be notified of acceptance, rejection or need for revision of the paper following the review process, which takes up to eight weeks. If accepted, the author will be responsible for incorporating the reviewers' comments, as appropriate. The author should correct the proofs and return them to the Editor within an agreed time-frame (usually 10 days). The paper will then be edited and returned to the author for comment/further changes if necessary, and the author's approval. Acceptance of a paper for publication in the *TRAFFIC Bulletin* will normally be confirmed when any outstanding points have been clarified with the Editor. Copyright of material published in the *TRAFFIC Bulletin* will be vested in TRAFFIC International.

EDITING AT TRAFFIC INTERNATIONAL: The editing process will include: reading the report, checking for sense and style and making adjustments accordingly, as necessary; standardizing spelling, punctuation, checking for provision of sources; communicating with the author over possible substantive changes; standardizing layout; scanning and placing illustrations, etc.

The editing period at TRAFFIC International usually takes a minimum of two weeks, depending on the length of the article and the extent of editing required. After this period, correspondence between the editor and the author will aim to finalize the text to the mutual satisfaction of both parties and to allow for any outstanding errors to be eliminated before the report is finalized.

GUIDE TO AUTHORS: Manuscripts should be written in the English language and submitted to the Editor via electronic mail (in Word, Rich Text format). Submissions in other languages may be considered for translation but an English summary must be prepared. All submissions must provide an approximate word count and the spelling should be thoroughly checked, using a computerized spell-checker, if possible.

A feature article in the *TRAFFIC Bulletin* will normally comprise the following structure, where possible:

Abstract. 200 words, or fewer, in italics. This should express briefly the purpose, results and implications of the study. Note that an Abstract is not necessary for Short Communications.

Introduction. This section should help familiarize the reader with the subject and explain the rationale for the study and the reasons for choosing any aspects highlighted in the report.

Background. This may be included, particularly on a subject with which readers may not be familiar, and will briefly cover geography and social environment of area covered.

Methods. The means by which data for the study were gathered, number of researchers, the duration of research, and study areas, must be clearly stated.

Distribution and Status. Information relating to a description of the species under discussion.

Legislation. A concise account of legislation/trade controls which may affect trade involving the subject under discussion should be included.

Results. The results can consist of further sections of text which should be broken up, with subheadings, as appropriate. If research has been weak and flawed, point this out, rather than try to hide the fact. By flagging the main points emerging from the research throughout the article, it will be much easier to draw together a discussion and conclusions section.

Discussion and Conclusions. These sections, which may be combined, should constitute an analysis of what the results actually show, what may be inferred from them (if relevant), and what may be concluded on the subject in question, including any limitations. No new results should be introduced in these sections.

Recommendations. These should be linked to the discussion/conclusions in the report. Try to make these as specific as possible, stating who should take action, where possible.

Acknowledgements. These should include acknowledgement of funders of research and production, as well as of reviewers and contributors.

References. See also below.

SPECIFIC STYLE REQUIREMENTS:

Text: Text should be in 10pt Times New Roman and reported in the third person. After a full-stop, there should be two spaces.

Paragraphs: Each paragraph must be indented five spaces using the tabulator (not space bar), and no spaces should appear between paragraphs, except before a new section heading.

Species names: Common or vernacular names of species should at first mention be accompanied by their full scientific name. If referring to a distinct species, use initial capital letters, for example, African Elephant *Loxodonta africana*. If discussing more than one species under a generic name, then no capital letter is used, for example, rhinoceroses (as opposed to Black Rhinoceros). The common name only is used in subsequent references to the species name, except in cases where there may be several common names in use or when there is no common name; in such cases the scientific name only will be referred to.

References in text: Reference all material that is not based on the observation of the author(s). Published literature is cited in the text by author, and year of publication (Mabberley, 1997); three or more authors are represented by the first author's surname (Chen *et al.*, 1996). Personal communications should be cited in text as: initial, surname and year (J. Smith pers. comm. to M. Brown, January 1999); correspondence cited as: initial, surname, in litt., month/year (T. Ravenscroft, in litt. to M. Pellerano, February 1998).

Numbers: Numbers from one to nine, and all numbers at the beginning of a sentence should be spelled out in full; numbers of 10 and more should be written as figures.

Units of measure/currency: All measurements should be in metric units. Currencies should at first mention have a USD exchange rate, though original currencies should be quoted rather than converted values.

Tables/Figures: Submit only essential tables and figures; these should not exceed 10 in number and should preferably be no more than five, or fewer. They must be referred to (in Arabic numerals) and interpreted in the text. Do not present the same data in a table and a figure. The caption should appear beneath the table/figure, and should indicate when the data were collected. All tables should be tabulated (do not use space bar), with no cells/boxes or horizontal/vertical rules. Rules will be incorporated at the desktop publishing stage. Where appropriate, both common and scientific names should be included in the table.

Illustrations: High quality colour/black and white slides/prints should be submitted by e-mail for selection by the Editor, in consultation with the author. Captions and name of photographer should be indicated. Maps should be of a quality for direct reproduction and to proportions appropriate for reproduction to a width of one column (80 mm) or one page (170 mm), and a maximum depth of 130 mm. It is the author's responsibility to obtain copyright clearance for reproduction of illustrative material and to ensure adequate acknowledgement.

Reprints: Following publication of the article, five reprints are provided free of charge. Additional copies can be obtained, stocks allowing, but postage costs will be charged for.

Please direct any queries to: traffic@traffic.org

TRAFFIC International

219a Huntingdon Road, Cambridge, CB3 0DL, UK.
Tel: (44) 1223 277427; Fax: (44) 1223 277237; E-mail: traffic@traffic.org

TRAFFIC Central Africa

Regional Office c/o IUCN, Regional Office for Central Africa, PO Box 5506, Yaoundé, Cameroon.
Tel: (237) 2206 7409; Fax: (237) 2221 6497; E-mail: tcaf@traffic.org

TRAFFIC East/Southern Africa

Regional Office c/o WWF Southern Africa Regional Programme Office
PO Box CY 1409, Causeway, Harare, Zimbabwe.
Tel: (263) 4 252533/252534; Fax: (263) 4 703902; E-mail: traffic@wwfsarpo.org

South Africa Office c/o Endangered Wildlife Trust, Private Bag x11, Parkview 2122, Johannesburg, South Africa.
Tel: (27) 11 486 1102; Fax: (27) 11 486 1506; E-mail: trafficza@ewt.org.za

Tanzania Office c/o WWF Programme Office, PO Box 106060, Dar es Salaam, Tanzania.
Tel/Fax: (255) 22 2701676; E-mail: traffictz@bol.co.tz

TRAFFIC North America

Regional Office c/o WWF-US, 1250 24th Street, NW, Washington, DC 20037, USA.
Tel: (1) 202 293 4800; Fax: (1) 202 775 8287; E-mail: tna@wwfus.org

Canada Office c/o WWF-Canada, Suite 1588, 409 Granville Street, Vancouver, BC, V6C 1T2, Canada.
Tel: (1) 604 678 5152; Fax: (1) 604 678 5155; E-mail: ecooper@wwfcanada.org

Mexico Office c/o WWF-Mexico Programme Office,
Ave. México 51, Col. Hipódromo Condesa, C.P. 06100 México, D.F., Mexico.
Tel: (52) 55 5286 5631; Fax: (52) 55 5286 5637; E-mail: areuter@wwfmex.org

TRAFFIC South America

Regional Office Quiteño Libre E15-12 y la Cumbre, Sector Bellavista, Quito, Ecuador.
Tel/Fax: (593) 2 226 1075; E-mail: tsam@traffic.sur.iucn.org

TRAFFIC East Asia

Regional Office Room 2001, Double Building, 22 Stanley Street, Central, Hong Kong.
Tel: (852) 2 530 0587; Fax: (852) 2 530 0864; E-mail: trafficca@biznetvigator.com

China Office c/o WWF-China Programme Office, Room 2616, Wen Hua Gong, (Laodong Renmin Wenhua Gong Dongmen), Beijing Working People's Culture Palace, Beijing 100006, People's Republic of China.
Tel: (86) 10 65116211; Fax: (86) 10 65116261; E-mail: teachina@wwfchina.org

Taipei Office PO Box 7-476, Taipei 106, Taiwan.
Tel: (886) 2 2362 9787; Fax: (886) 2 2362 9799; E-mail: treatai@ms1.hinet.net

Japan Office 6th Floor, Nihonseimei Akabanebashi Bldg, 3-1-14, Shiba, Minato-ku, 105-0014, Tokyo, Japan. Tel: (81) 3 3769 1716; Fax: (81) 3 3769 1304; E-mail: traffic@trafficij.org

TRAFFIC India

Regional Office c/o WWF-India, 172-B Lodi Estate, New Delhi-110 003, India.
Tel: (91) 11 41504786; Fax: (91) 11 43516200; E-mail: ssinha@wwfindia.net

TRAFFIC Southeast Asia

Regional Office Unit 9-3A, 3rd Floor, Jalan SS23/11, Taman SEA, 47400 Petaling Jaya, Selangor, Malaysia. Tel: (603) 7880 3940; Fax: (603) 7882 0171; E-mail: tsea@po.jaring.my

Greater Mekong Programme Office c/o WWF-Viet Nam, 39 Xuan Dieu Street, Tay Ho District, Ha Noi, Viet Nam.
Tel: (84) 4 3 719 3115; Fax: (84) 4 3 719 3093; E-mail: traffic-gmp@traffic.netnam.vn

TRAFFIC Europe

Regional Office c/o TRAFFIC International, 219a Huntingdon Road, Cambridge CB3 0DL, UK.
Tel: (44) 1223 277427; Fax: (44) 1223 277237; E-mail: traffic@traffic.org

Belgium Office Bd Emile Jacqmain 90, B-1000 Brussels, Belgium.
Tel: (32) 2 343 8258; Fax: (32) 2 343 2565; E-mail: traffic@traffic.org

Central Eastern Project Office c/o WWF-Hungary, 1141 Budapest, Álmos vezér útja 69/A, Budapest, Hungary.
Tel: (36) 1 214 5554 (Ext 132); Fax: (36) 1 212 9353; E-mail: traffic@wwf.hu

France Office c/o WWF-France, 1 Carrefour de Longchamp, 75016 Paris, France.
Tel: (33) 1 55 25 86 40; Fax: (33) 1 55 25 84 74; E-mail: sringuet@wwf.fr

Germany Office c/o WWF-Germany, Rebstocker Str. 55, D 60326 Frankfurt, Germany.
Tel: (49) 69 79144 183; Fax: (49) 69 617221; E-mail: homes@wwf.de

Italy Office c/o WWF-Italy, Via Po 25/c, 00198 Rome, Italy.
Tel: (39) 06 84497357; Fax (39) 06 84497356; E-mail: traffic.italy@wwf.it

Russia Office c/o WWF-Russia Programme Office, Nikoloyamskaya str. 19, Building 3, 109240 Moscow, Russia; Tel: (007) 4957270939; Fax: (7) 4957270938; E-mail: avaisman@wwf.ru

Sweden Office c/o WWF-Sweden, Ulriksdals Slott, S-17081 Solna, Sweden.
Tel: (46) 8 624 7400; Fax: (46) 8 85 1329; E-mail: mats.forslund@wwf.se

TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. It has offices covering most parts of the world and works in close co-operation with the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

For further information contact:

The Executive Director
TRAFFIC International
219a Huntingdon Road
Cambridge CB3 0DL
UK

Telephone: (44) (0) 1223 277427

Fax: (44) (0) 1223 277237

Email: traffic@traffic.org

Website: www.traffic.org

TRAFFIC
the wildlife trade monitoring network

is a joint programme of

