

In July 2011, Indonesia's Natural Resources Conservation Agency seized an illegal wildlife shipment at Merauke Airport in the country's Papua province. The haul included 13 reptiles and 18 echidnas (*Tachyglossidae* spp.). Information obtained at the time did not indicate which of the four echidna species was found, but photographs taken between February and March 2011 show wild-caught Short-beaked Echidnas *Tachyglossus aculeatus* kept at a trader's holding facility in the same town. It is reasonable to assume that this seizure involved that same species.

The Short-beaked Echidna is found in Australia, Indonesia and Papua New Guinea and has been assessed as being of Least Concern (IUCN, 2011). It is not listed in the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES) or under Indonesia's legislation. Indonesia allows the harvest



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## TRADE IN “CAPTIVE BRED” ECHIDNAS

CLAIMS OF CAPTIVE BREEDING WARRANT FURTHER INVESTIGATION AS EFFORTS TO PRODUCE SECOND-GENERATION SHORT-BEAKED ECHIDNAS OVER LAST 100 YEARS FAIL

and export of non-protected species under licence within a quota system. Despite the absence of any quota for this species, authorities have issued a permit allowing at least one individual to trade in Short-beaked Echidnas declared as captive-bred.

Studies on the breeding biology and behaviour of the species have been conducted in Australia, but little or no published information is available for either the Indonesian or Papua New Guinean populations. In 2001, Temple-Smith and Grant concluded that many important aspects of their reproduction remain unclear and captive breeding has been rare and unpredictable.

The first recorded captive breeding took place in 1908 (Heck, 1908, in Rismiller and McKelvey, 2000), but since this time, few births have been recorded. Prior to 2007, only seven births were recorded in Australia (A. Ferguson, pers. comm. May 2012), but in recent years Perth Zoo has reported the breeding of five young over three years (Ferguson and Turner, 2012). To date there have been no verifiable reports of second generation (F2) captive-breeding in the species. In 2000, Rismiller and McKelvey reported that of 75 Short-beaked Echidnas kept in zoos outside Australia, all but three had been taken from the wild.

The American Zoo Association's (AZA) Regional Studbook for the Short-beaked Echidna provides records of the 119 animals held in American zoos since 1903. Over the past 108 years this captive population has produced just 19 captive-bred animals, only four of which survived beyond 18 months of age. As of 2011, only three were still living. Despite the longevity of some captive individuals, it seems clear that if these animals are to be kept on a long-term basis outside range countries, the captive population will have to be supplemented

through the recruitment of animals sourced directly from Australia, Indonesia or Papua New Guinea.

In November 2011, a pair of Short-beaked Echidnas were added to the AZA Regional Studbook population. Records show the animals were imported from Indonesia as captive bred. Information collected by LEMIS, the US Fish and Wildlife Service (USFWS) data reporting service, indicates that two shipments of Short-beaked Echidnas entered the USA from Indonesia in 2011 comprising five animals, and one shipment containing two specimens arrived in July 2012. All seven were declared as “farmed”.

Photographs: SHORT-BEAKED ECHIDNAS

*Tachyglossus aculeatus*, Tasmania, Australia.



CLAIRE BEASTALL / TRAFFIC

In April 2011, a single echidna was advertised for sale on a Japanese-language advertisement posted on the internet. This stated that two other echidnas had been offered previously, but had been quickly sold. TRAFFIC has received information from another source on the export of echidnas from Indonesia to Japan.

Considering the failure of any facility to produce second-generation Short-beaked Echidnas in captivity over the past 100 years, the apparent success of Indonesian wildlife traders to produce even the seven animals imported into the USA is without doubt remarkable. Whilst these numbers are small and, if wild-caught, seem unlikely to pose an immediate threat to the species in the wild, the claims of breeding should at the very least be documented. Echidnas mature late in life, give birth to a single young, have a long lactation period (Nicol and Andersen, 2007) and have specialized denning habits while raising their young, characteristics which suggest that commercial captive breeding of the species is unlikely. Recent records obtained from Indonesia indicate that around 40 “farmed” Short-beaked Echidnas were exported in 2012.

Given the difficulties of breeding the species in captivity and the apparent frequent laundering of wild-caught animals declared as captive-bred from Indonesia (e.g. Nijman and Shepherd, 2009), it seems highly likely that any captive breeding claims are false. Furthermore, the thwarted attempt to smuggle wild Short-beaked Echidnas out of West Papua demonstrates that there is an illegal supply of wild-collected animals.

TRAFFIC urges the authorities in Indonesia to investigate claims of breeding this species and to take appropriate legal action against any trader found falsely declaring animals as captive-bred. Importing countries should consult experts on this species, as well as the authorities in Indonesia, to confirm that the provenance of the animals is accurately declared.

## REFERENCES

- Ferguson, A. and Turner, B. (2012). Reproductive Parameters and Behaviour of Captive Short-beaked Echidna (*Tachyglossus aculeatus acanthion*) at Perth Zoo. *Australian Mammalogy*. <http://www.publish.csiro.au/paper/AM12022.htm>.
- Heck, L. (1908). Zuchtung im Berliner Zoologischen Garten. *Gesellschaft für Naturforschung Freunde Berlin*. Pp.187–189.
- IUCN (2012). *IUCN Red List of Threatened Species*. [www.iucnredlist.org](http://www.iucnredlist.org). Viewed on 26 June 2012.
- Nicol, S. and Andersen, N.A. (2007). The life history of an egg-laying mammal, the echidna (*Tachyglossus aculeatus*). *Ecoscience*. 14(3):275–285.
- Nijman, V. and Shepherd, C.R. (2009). *Wildlife trade from ASEAN to the EU: issues with the trade in captive-bred reptiles from Indonesia*. TRAFFIC Europe report for the European Commission, Brussels, Belgium.
- Rismiller, P.D. and McKelvey, M.W. (2000). Frequency of breeding and recruitment in the Short-beaked Echidna, *Tachyglossus aculeatus*. *Journal of Mammalogy* 81(1P):1–17.
- Temple-Smith, P. and Grant, T. (2001). Uncertain breeding: a short history of reproduction in monotremes. *Reproduction, Fertility and Development* 13:487–497.

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## International illicit trade awareness campaign includes wildlife focus

A new awareness campaign calling on tourists to help reduce demand for illicit goods and services linked to transnational organized crime will be launched later this year. Preparations for the campaign were set in motion during the Spring Meeting of the Chief Executive Board of the United Nations in Madrid. A Cooperation Agreement was signed on 5 April 2013 between World Tourism Organization (UNWTO) Secretary-General, Taleb Rifai, and the United Nations Office on Drugs and Crime (UNODC) Executive Director, Yury Fedotov in the presence of United Nations Secretary-General, Ban Ki-moon.

The joint campaign aims to raise awareness among international tourists about the types of illicit goods and services to which they are often exposed during their travels and which directly or indirectly fund organized crime groups. Travellers can play a key role in reducing demand for these products through ethical consumer choices. The campaign will encourage tourists to make informed decisions and help reduce demand for trafficking in persons, cultural artefacts, fauna and flora such as ivory products, as well as counterfeit goods and illicit drugs.

United Nations Secretary-General Ban Ki-moon commended this innovative joint initiative between the two partner UN Agencies: “The illegal trade in goods and services often funds unscrupulous people involved in human trafficking, the illicit ivory trade and other areas that cause immense suffering and destruction. Well-informed tourists can make a real difference in turning the tide against these criminal acts.”

With more than 1 billion tourists now crossing international borders each year, there is a growing opportunity to call on tourists to act and reduce demand for these illicit products which in many cases are providing a funding source for organized crime. The campaign drives the message that while some products may seem harmless, the demand created and their sale can, in fact, have devastating effects on the lives of innocent people, on wildlife or on cultural property. The billions of dollars generated through such trade also fund criminal groups who use this money to branch out into other illicit and unethical lines of business.

The campaign will seek to engage the tourism industry including hotel chains, travel agencies and airlines to lend support in raising awareness among tourists and help contribute to limiting these illicit markets.