



Deloitte Impact Day

Trade Analytics for the Endangered Species Trade

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Presentation: 22 November 2019

Aims Of Today




- Explore options to improve the trade analytics for the legal trade in endangered species
- Current trade analytics is based on ad-hoc research into individual species by academic researchers or NGOs
- Happy to look at broad range of ideas to improve what is in place today both real and pragmatic together with 'blue sky' thinking.

How It Started!

Analysis of trade in Elephantidae specimens between Australia and UK from 2010 to 2016 using the CITES Trade Database:

- The number of Elephantidae 'specimens' exported from the UK to Australia amounted to 2,953 'units'
- In the same timeframe the number of Elephantidae 'specimens' recorded as imported in to Australia from the UK equalled 3 'units'
- **A discrepancy of 2,950 'units'.**




 CARLEX DESIGN


ABOUT US ▾ INDIVIDUALS ▾

Company based in Poland

DODGE CHALLENGER SRT HELLCAT



The gear shift knob was plated with silver, and the part on which the numbers of gears are placed, was made of faux and finished with silver and leather. The story of creation ends with the final finish of the car upholstery elements made of rare exotic leathers. The team of Witold Kopciuch, master of styling, is responsible for all the works concerning leather processing, applying on complex interior elements and sewing.



<https://www.carlexdesign.com/en/realisations/dodge-challenge-srt-hellcat>

Elephant Skin Auctions in Zimbabwe Are Booming—And Legal

The surging trade in elephant hides is stirring controversy amid the poaching crisis.



Mens Messenger Bag - Grey Elephant

\$5,000.00

Species: *loxodonta africana*. Lining: Garment Suede...



“After years of researching and working on the demand for illegal wildlife ‘products’, we have come to the conclusion that the illegal trade can not be tackled until the loopholes in the legal trade in endangered species are closed. CITES needs modernising to cope with current trade volumes.”



The trade in flora and fauna was confirmed as the second biggest threat to species survival in the May 2019 IPBES* Report which states that up to 1 million species are potentially facing extinction.

*The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

CITES Overview

- Convention on International Trade in Endangered Species of Flora and Fauna
- Designed in 1973, entered into force in 1975
- 183 signatory parties
- Non-self-executing treaty: national governments responsible for compliance/enforcement
- Regulates trade through 'listing' species seen as threatened from continuing trade:
 - Appendix I: no commercial trade allowed (~1,000 species)
 - Appendix II: trade restrictions (~34,500 species)
- **CITES still uses its 1970s, paper-based permit system**



The Scale of the Problem – The Value of Trade



The CITES regulated legal trade in flora and fauna has an estimated worth of **US\$320 Billion pa**



CITES core budget to administer the legal trade in flora and fauna is **US\$6 Million pa**



The illegal trade is estimated to be worth **US\$91– US\$258 Billion pa** and exploits the loopholes in the legal trade system



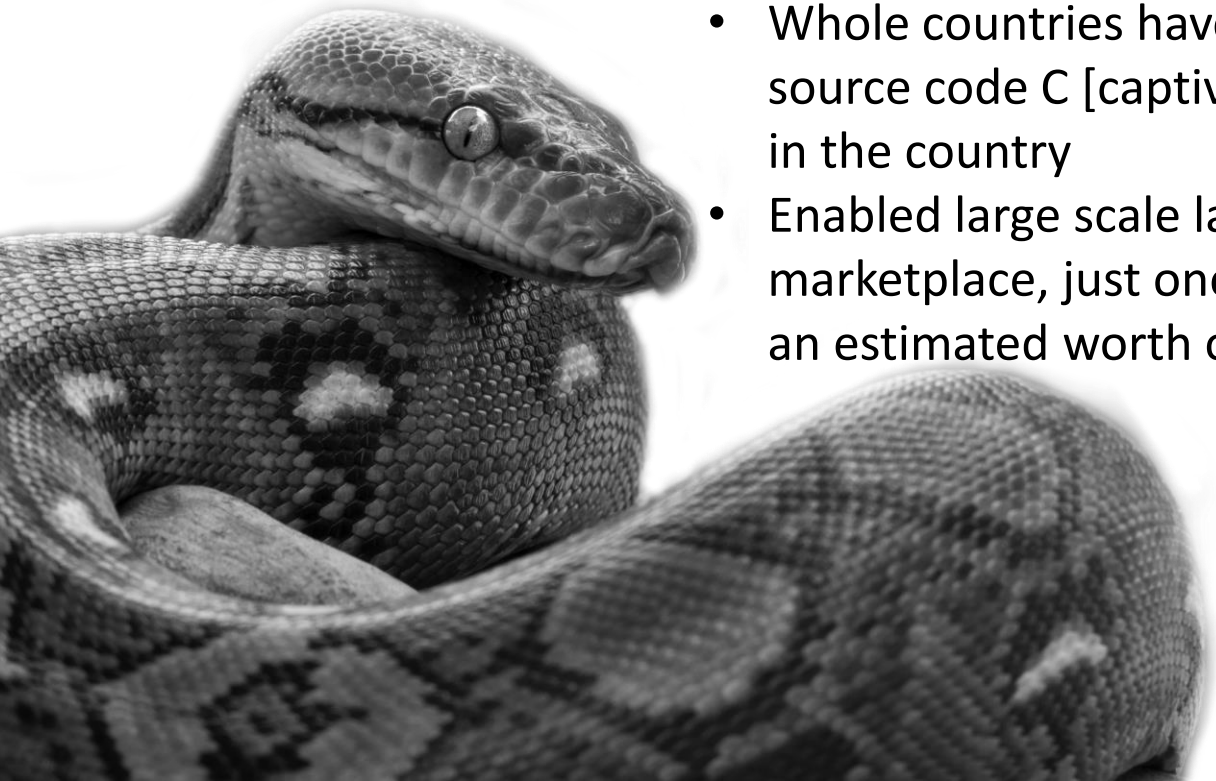
You do the math
**US\$320 Billion pa vs.
US\$6 Million pa**

Help us redress the balance
Because Nature Needs More



The Value of Trade – Example

- Extract from 2016 EU Parliament document - The wildlife trade is one of the most lucrative trades in the world. The **legal trade into the EU alone is worth EUR 100 billion annually**
- Example - just one species - python:
 - 96% of python skins are used in the European fashion market
 - In 2013 the value of the python skin trade was estimated to be **US\$1 Billion**
 - Whole countries have been found to be exporting pythons with a CITES source code C [captively bred] when there is no evidence of python farming in the country
 - Enabled large scale laundering of illegal python skins into the legal marketplace, just one seizure of illegal python skins in China in 2016 having an estimated worth of **US\$48 Million**





The Lack of Data Problem

- **Giraffes were not listed under CITES until August 2019**
- There is an existing legal and illegal trade in giraffe body parts – meat, skin and bones
- **The scale of both the legal and illegal trade in giraffe body parts is completely unknown**
- If a species is not listed on the CITES appendices, no trade data is collected and no permits are required
- Giraffe numbers plummeted by a staggering 40% in the last three decades, and less than 100,000 remain today

Nearly 40,000 giraffe parts have been imported to the US in last 10 years

Researchers from the Humane Society found 52 US locations in which giraffe products continue to be sold



The Lack of Data Problem



Pangolins are believed to be the world's most trafficked mammal, targeted most often for their scales. Untold numbers are killed each year throughout their range in Asia and Africa.

PHOTOGRAPH BY BRENT STIRTON, GETTY/NATIONAL GEOGRAPHIC

ANIMALS | WILDLIFE WATCH

Cowboy boots sold in the U.S. fueled the decline of pangolins



- Pangolins (8 species) – all listed on App II since 1995 and App I since 2016
- Most trafficked mammal on the planet
- 90%+ of trade is illegal – not recorded
 - CITES Trade DB records 1,485 trade ‘incidents’ between 1977 and 2014
 - This ‘converts’ to 809,000 pangolins - traded as live, bodies, skin, meat, scales, powder, feet, claws, tails, skulls, leather, shoes(!)

Current Data Collection

- Current CITES default is any species can be traded without restrictions, unless it is listed on Appendices
- No data are collected by CITES unless a species is listed
- **Appendix II species only require export permits, Appendix I are NOT traded commercially (trophy hunting has special exemptions)**
- Export permits are (mostly) paper based and data collection is (in the main) still manual
- All data collection is up to national governments
- CITES mandates submission of trade data to CITES trade database (<https://trade.cites.org>) only ONCE a year
- **Data are mostly submitted late, with poor quality or not at all**
- CITES **'encourages'** submitting import data, but few countries do



CITES Permit Example

Permit contains minimal data:

- Species Name
- Description (here: live specimen)
- Appendix
- Quantity (should include unit)

Massive CITES guideline documents for valid quantity/units, but not being followed

Unit is often left blank – could mean anything

CITES CONVENTION SUR LE COMMERCE INTERNATIONAL DES ESPÈCES DE FAUNE ET DE FLORE SAUVAGES MENACÉES D'EXTINCTION

PERMIS / CERTIFICAT N° 5078 Original

2. Valable jusqu'au 21/07/2013

3. Importateur (nom et adresse): ZOO FAUNA ART, ARMENIA YERVAN, ST.G.MAHARI 148

4. Exportateur (nom et adresse, pays): THE BIRDS OF SUN SET, A.V KIBILA 4 N°49, KINSHASA, R.D. CONGO

5a. Pays d'importation: **ARMANIA**

5b. N° du timbre de sécurité: CD1174003

6. Nom, adresse, cachet/sceau national et pays de l'organe de gestion: Organe de gestion CITES / RDC, 7° Rue Limete, Q. Industriel n° 17, KINSHASA / GOMBE, Commune de Limete, République Démocratique du Congo

7/8. NOM COMMUN ET NOM SCIENTIFIQUE (genre et espèce): MANGABEY A GORGE BLANCHE, *Lophocebus albigena*

9. Description des parties ou produits: **VIVANT**

10. Annexe et source: II W

11. Quantité (y compris l'unité): XXX10XX

12. Pays d'origine: X

12a. Pays de provenance: X

12b. N° de l'établissement ** ou date de l'acquisition ***: X

13. Pays d'origine: X

13a. Pays de provenance: X

13b. N° de l'établissement ** ou date de l'acquisition ***: X

14. Pays d'origine: X

14a. Pays de provenance: X

14b. N° de l'établissement ** ou date de l'acquisition ***: X

15. Connaissance/Lettre de transport: KINSHASA

16. Approbation de l'exportation: Bloc, Quantité

17. Signature et cachet officiel: Le Directeur Général de Service, CITES, MUAMBA KAMBA

18. Port d'exportation, Date, Signature, Timbre et titre officiel

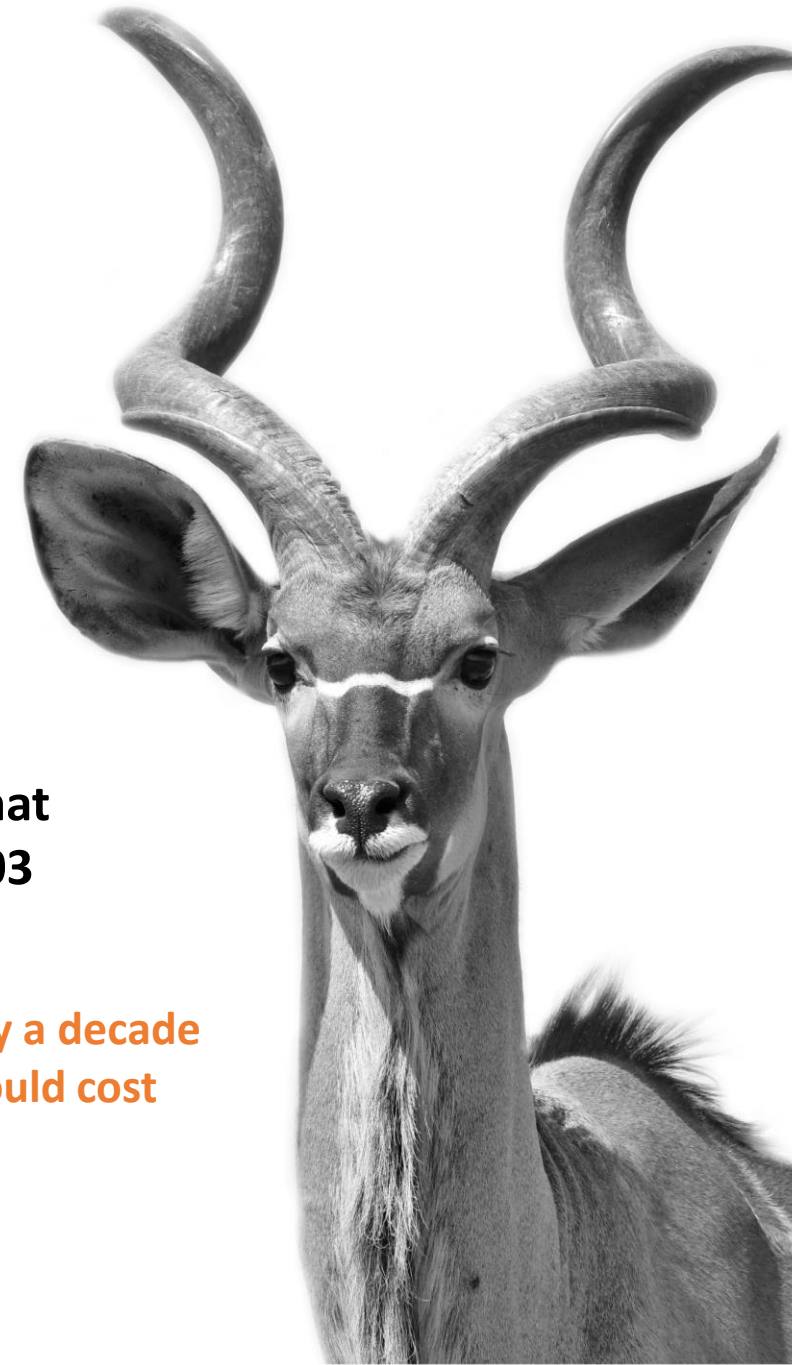
CITES PERMIS / CERTIFICAT N° 5078

The Data Quality Problem

- A paper published in 2015 outlined the prevalence of documentation discrepancies in CITES trade data for Appendix I and II species **exported out of 50 African nations** (and **198 importing countries**) between the years 2003 and 2012.
- The data represented **2,750 species**. Of the **90,204 original records** downloaded from the database:
 - **Only 7.3% were free from discrepancies**
 - **Increases in discrepancy-rates between 2003 and 2012 suggests that the trade was monitored less effectively in 2012 than it was in 2003**



- **CITES e-permit system has been discussed for nearly a decade**
- **Global e-permit system integrated with customs would cost less than US\$30 Million**



Implications for Endangered Wildlife

- “A quick scan of the records demonstrates that vast and consistent data discrepancies are clear in many cases, and that the true volume of many traded endangered species is simply unknown. This is alarming, considering the reason all of these species are included in CITES is because they are vulnerable to over-exploitation, and extinction.”

Example: The ‘discrepancy’ in export and import data for hippo teeth (ivory) amounts to 2% of the global hippo population



Impact of Illegal Wildlife Luxury Consumption



- Illegal trade is massive (up to 80% of value of legal trade)
- Driven by status and social differentiation consumption
- Illegal wildlife items coveted by 'beyond legal luxury' consumers
- Very little trade data available for illegally traded species – based on seizures or poaching rates



Why Trade Data Matters

- In theory, decision making at CITES in relation to listing species and setting export quota should be based on trade (legal+illegal) and population data
- In practice, the existing trade data are rarely discussed at CITES because everyone who attends knows they are not reliable
- **CITES base assumption is “Sustainable use is good”, even if there is no proof of sustainability (as long as there is no disproof!)**
- 90% of the people who attend CITES are biologists/ecologists, they don't understand trade or money (or don't care?)
- Industry do not attend – generally ignore CITES

What We Are Looking For

- We are already working on improving the data quality of CITES trade data – pushing for electronic permits
- We/CITES need more and better data on the legal trade in endangered species
- Need to crosscheck and reconcile for auditing purposes
- Ability to monitor changing trends that have implications for poaching/illegal trade and trade quota decisions
- Measure the volume and value of legal trade
- Early warning system if trade/seizures go up rapidly for a species
- Estimate volume and value of non-listed, but internationally traded species (such as kangaroos)



Why We Came To Deloitte



- Personal luxury (clothing, accessories, Jewellery etc)
- High-end furniture and housewares
- Luxury hospitality, fine dining and gourmet food
- TAM & pharmaceuticals

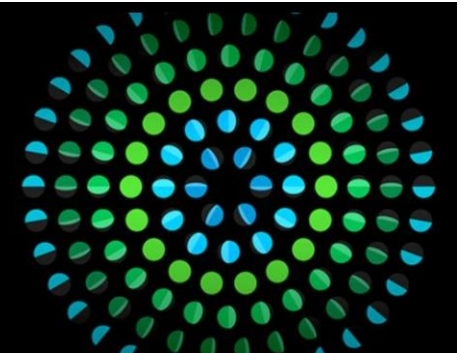
Solutions

Global Trade Analytics Global Trade Radar

Global Trade Radar is an innovative, multi-j provides companies with insights into their decision making, identifies cost-savings op weaknesses.

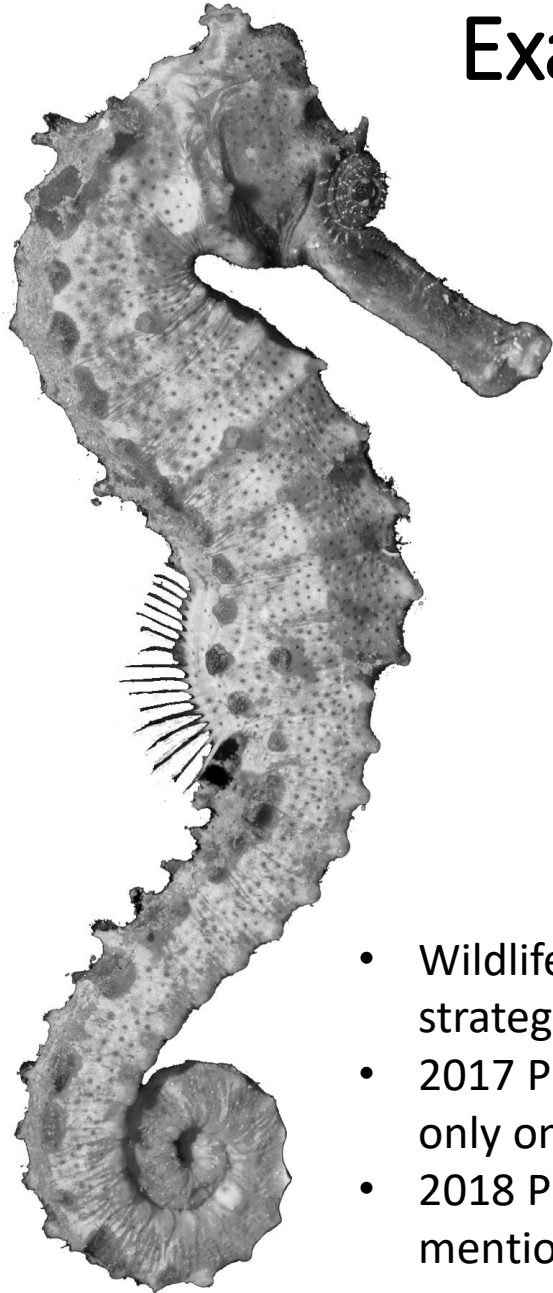
Deloitte Access Economics

Deloitte Access Economics is united by a passion for economics and a belief that it can create a better future for all. Our deep economic rigour comes with practical commercial advice to help shape public policy, deliver business insights and inform investment strategy.



The expertise and the experience to make a difference for endangered species.

Example Of What We Explored Tried Beyond CITES



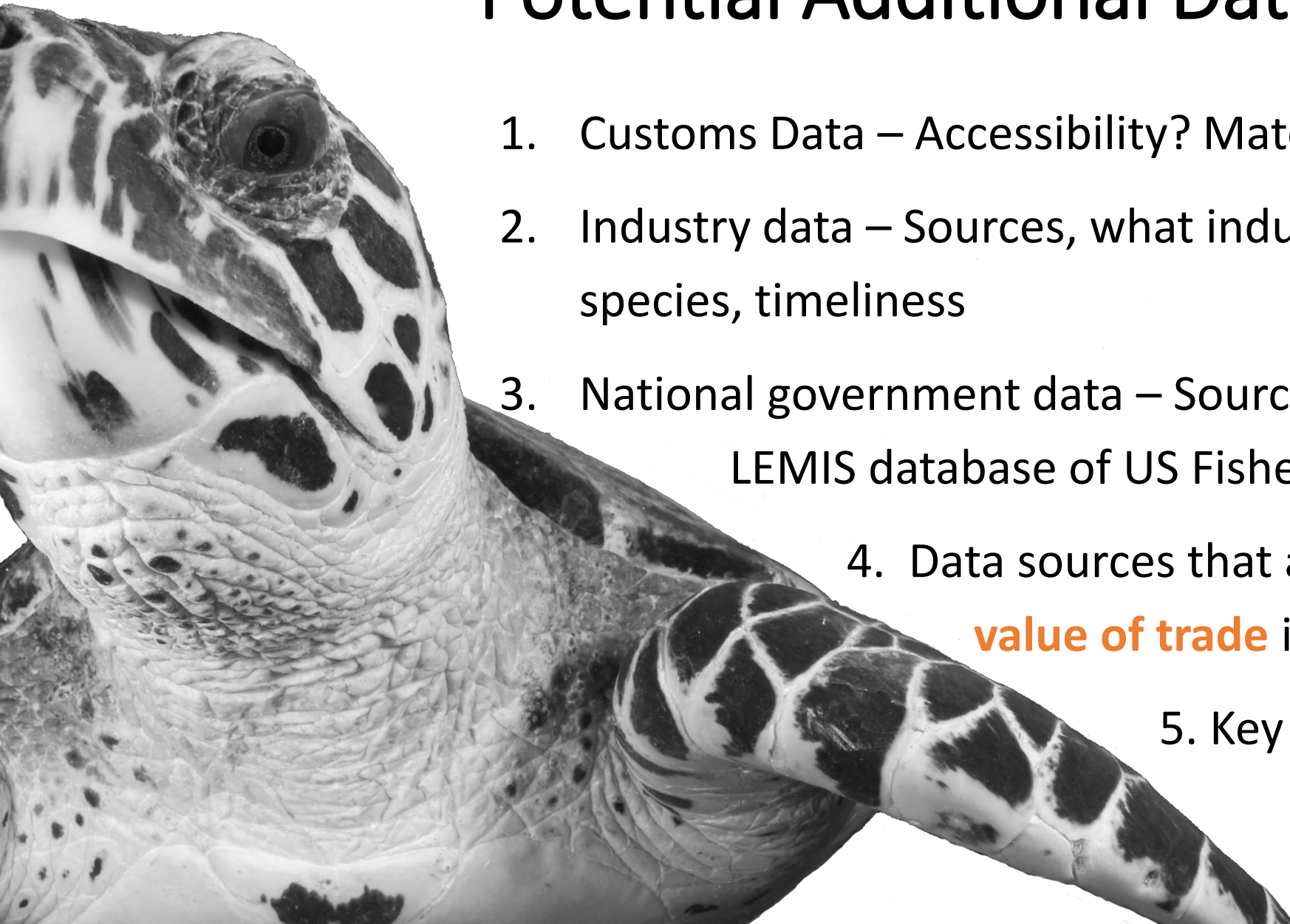
- Wildlife not factored into sustainable fashion strategy – supply chain transparency – **Higg Index**
- 2017 Pulse Report - the word 'wildlife' features only once.
- 2018 Pulse Report - the word 'wildlife' is not mentioned at all.



- The report contains only two mentions of the word 'wildlife' (page 9) and only in relation to climate change.

Potential Additional Data Sources

1. Customs Data – Accessibility? Matching?
2. Industry data – Sources, what industries, availability by species, timeliness
3. National government data – Sources, accessibility (e.g. LEMIS database of US Fisheries & Wildlife)
4. Data sources that allow estimates of the **value of trade** in one/several species
5. Key Regions – US, EU, China, South Africa





Trade Analytics

1. Monitoring trends in volume/value of trade of species or higher categories (mammals, birds, reptiles, timber etc.)
2. **Early warning system for species if sudden increase in legal trade/illegal seizures**
3. Data reconciliation and conversion – all current work in academic research is ad-hoc
4. Translating data into policy advice



How the Results Will Be Used

Use the results to lobby CITES and signatory countries on improving data collection and monitoring

Continue to work with Australian Government to push for change at CITES

Help us frame the case for electronic permits and increased frequency of data submission to trade database

Ideas For The Day



Review and Next Steps





Thank you
for helping to
ensure that we are
around in the wild
for future
generations!

We will keep
you posted

