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OF WILD FAUNA AND FLORA



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ELEPHANT TRADE INFORMATION SYSTEM (ETIS) UPDATED TREND ANALYSIS

This document has been submitted by the Secretariat on behalf of TRAFFIC in relation to CoP19 Doc. 66.6 on the *Report on the Elephant Trade Information System (ETIS)*.*

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This document has been prepared by TRAFFIC as the manager of ETIS in relation to document [CoP19 Doc. 66.6](#) on the Report of the Elephant Trade Information System (ETIS).

This report is for an extended data set including additional ETIS records submitted for 2020 and newly reported 2021 records. Based on these updated data, the report provides updated summaries and trend analysis results as presented in PART I and II of CoP19 Doc. 66.6 (including Figures 1-3)¹.

ETIS DATA

Data included in the analyses presented in this report were downloaded from the ETIS database on 5 October 2022, at which time it contained 33,855 records from 1989 – 2021. The majority of records (n = 30,875) represented ivory seizures and confiscations (hereafter referred to as ‘seizures’ or ‘records’), while the remainder comprised seizures of non-ivory elephant specimens.

Reporting by the Parties increased in 2021 (n = 62 Parties) compared to 2020 (n = 49). For 2021, 40 Parties reported seizure data and 22 reported they made no seizures of elephant specimens. An additional 88 seizures (12%) were added to the total of 719 seizures previously reported for 2020 in CoP19 Doc. 66.6. This brought the total seizures for 2020 to 807.

A total of 1,148² new seizure records were added to the database for 2021. Compared to the 807 records in the database for 2020, the 1,148 records for 2021 represented an addition of 42%. Reported data for number of seizures and weight seized from 2008 – 2021 are tallied in Figure 1³.

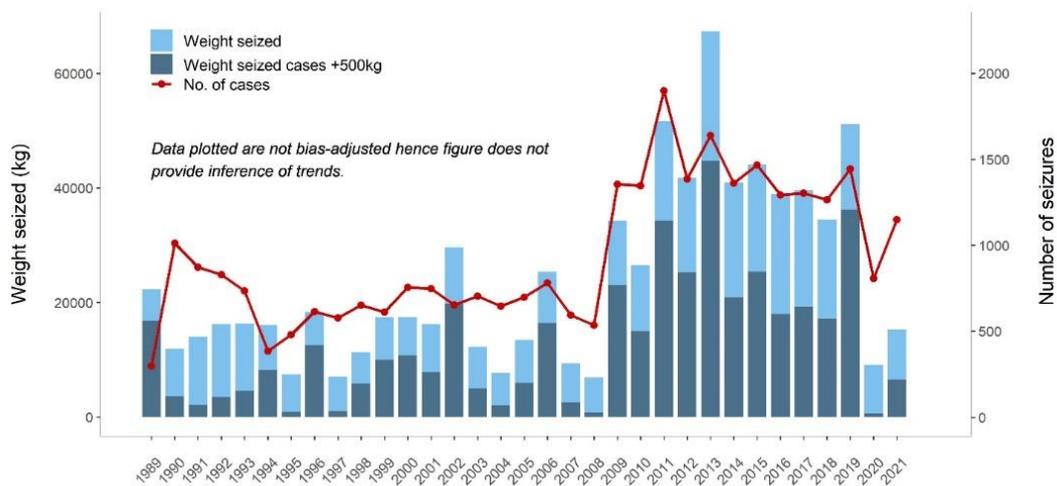


Figure 1: Number of ivory seizure cases and weight by year from 1989 – 2021. Summaries are based on data downloaded from the ETIS database on 5 October 2022. Number of seizures includes seizures and confiscation reported to ETIS. Weight seized refers to the total ivory weight from the reported data, the estimated weights for records with number of pieces but no weight⁴, and the Raw Ivory Equivalent (RIE) weights for both reported or estimated worked ivory seizures weights (based on methods described in Annex 1c of [SC74 Doc. 68](#)).

¹ The methodologies used to derive data summaries and modelling results are as published in [CoP Doc. 66.6](#) and [SC74 Doc. 68](#).

² An additional 97 records were collected by ETIS from non-MA sources that were identified as official national government sources but are still being reviewed by the MAs concerned and therefore were not included in the tallies presented here or in the trend analysis.

³ Data tallied in Figure 1 should not be interpreted as a trend, nor are they suggestive of absolute quantities of ivory seized over time, because of inherent bias in the seizure data stemming from variable seizure and reporting rates that are likely not similar for a given country between years, or for a given year between countries.

⁴ Of the ivory seizures (n = 30,875), 48% had both the number of pieces and weight of raw or worked ivory reported to ETIS, and therefore constituted the basis for estimating missing weights for seizures which reported the number of pieces but not their weight. Worked ivory weights were converted to Raw Ivory Equivalent weights (RIE) to account for wastage when raw ivory is worked. Collectively and hereafter in this report, weight seized refers as applicable to the total of: raw ivory seizure weight from the reported data; the estimated weights for records with number of pieces but no weight; and the RIE weights for both reported or estimated worked ivory seizures weights.

TREND ANALYSIS

Updated trend analysis included ETIS data spanning from 2008 – 2021, or 18,244 ETIS records from 69 countries. Models were run using exactly the same methodology as for the results published in [CoP Doc. 66.6](#) and [SC74 Doc. 68](#).

Results for the transaction index (Figure 2) and the composite weight index (Figure 3) are shown for each ivory type and weight category as well as for the composite index across all categories. Estimates are plotted with 95% credible intervals for results presented in CoP19 Doc. 66.6 (grey) and the results of the models with updated data (black). It is noted that indices are presented relative to the first year in the time series, or 2008, which is set to a value of 100, and thus should not be interpreted as absolute values.

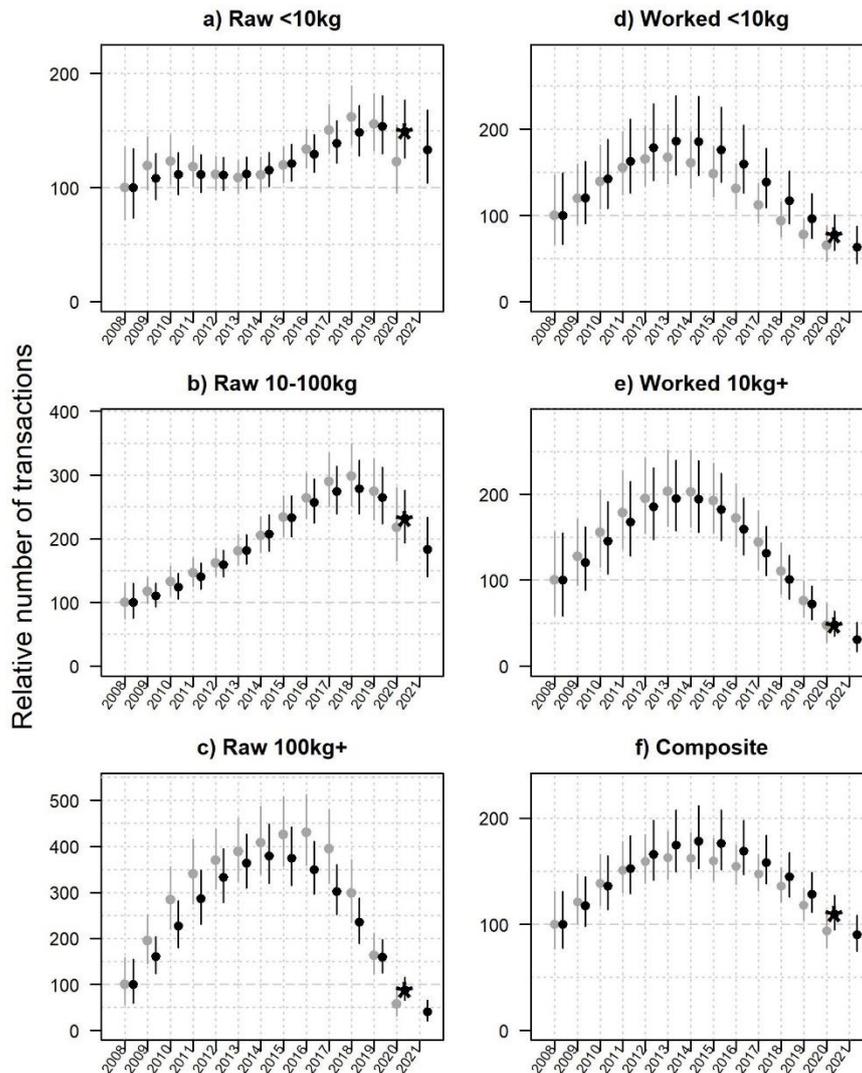


Figure 2. Transaction index. Transaction index estimates for (a) small (<10 kg), (b) medium (10-100 kg), and (c) large (≥ 100 kg) raw ivory classes; (d) small (<10 kg), and (e) large (≥ 10 kg) worked ivory classes; and (f) the composite across all ivory types and weight classes. Mean estimates (bold dot) are shown with 95% credible intervals for models presented in [CoP19 Doc. 66.6](#) (grey) and the results of the models with updated data (black). Asterisk is denoting that 2020 data (and estimates) likely represent an abnormal year, acting as an outlier that could impact results (see also Annex 2 of CoP19 Doc. 66.6). Models are based on ETIS data downloaded from the database on 5 October 2022.

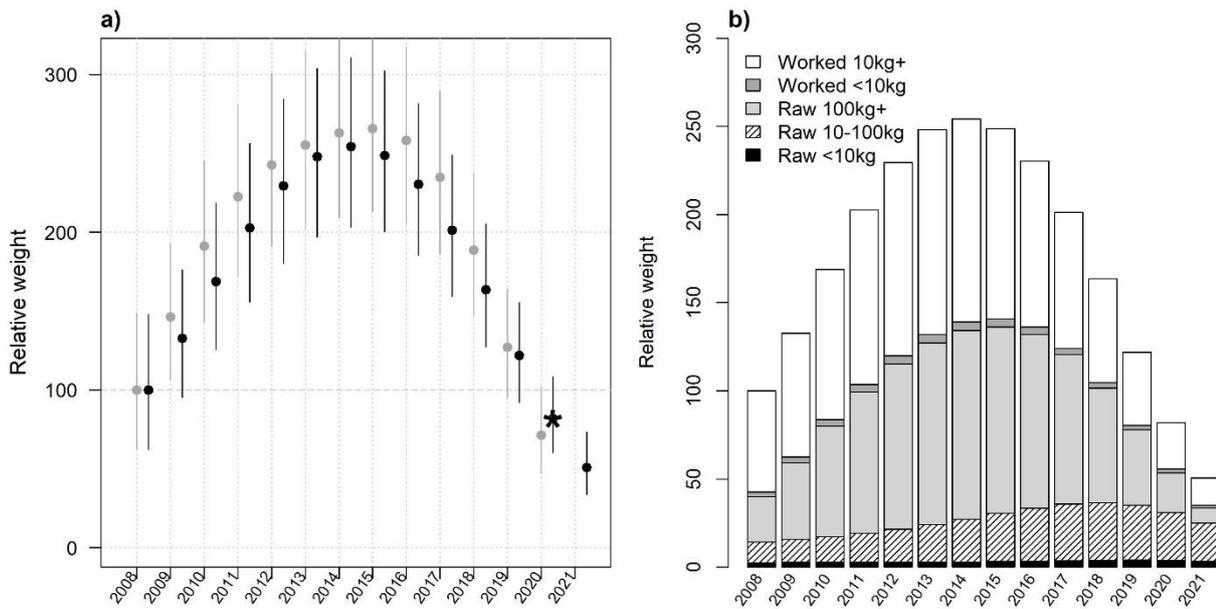


Figure 3. Weight index. (a) Composite of weight index estimates across all ivory types and weight classes for models presented in [CoP19 Doc. 66.6](#) (grey) and the models with updated data (black), where mean estimates are shown with 95% credible intervals. The asterisk is denoting that 2020 data (and estimates) likely represent an abnormal year, acting as an outlier that could impact results (see also Annex 2 of CoP19 Doc. 66.6). (b) weight index estimates depicted by ivory type and weight classes. Models are based on ETIS data downloaded from the database on 5 October 2022.