

In Assam, a horn has value only on a living rhino

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On 22 September 2021 coinciding with World Rhino Day, 2,479 greater one-horned rhino horns were incinerated in Assam with full public participation in accordance with a decision taken by the State Government of Assam. The State government took this historic decision to send a strong message against wildlife crime and the illegal wildlife trade, especially the poaching of rhinos, and to strengthen the belief of the Assamese people that a rhino horn holds value only on a living rhino.

The State government is committed to the conservation of the rhinos, which is recognized as a protected species and is working together with all stakeholders and local communities for the better conservation of the species. This is evident by recent successes in tackling poaching. The most recent rhino census in 2022 revealed that numbers in Assam have increased to 2,895 which represents about 72% of the total global greater one-horned rhino population. Manas National Park (NP), a protected area where the rhino population has been recently restored through translocations, now holds 50 rhinos. The aim is to establish more new populations in the State following a collaborative model. The species is listed as vulnerable by IUCN. While population numbers are improving, the species is still strongly dependent on conservation and protection (Rookmaaker et al. 2017).

The rhino horn destruction in Assam was carried out as per the provisions listed in the Wildlife Protection Act 1972, under Section 39 (3) (c). The Government of India in their letter no. 1-60/89-WL dated 4 November 1994 had advised the State to dispose of old stock of wildlife trophies, animal parts and products, where no court proceedings were pending, and to retain just a few for educational and awareness-generation purposes. The horns had mostly been seized during

anti-poaching operations and had been held for several decades, some had also been recovered by the wildlife authorities from rhinos which had died from natural causes. The State government constituted a committee under the Chairmanship of the Chief Wildlife Warden, Assam for “Reconciling of the trophies, animal articles etc. derived from scheduled animals and destruction of the same thereof”. The horn destruction work was planned and executed in accordance with notification FRM.29/2020/47 of 29 July 2021.

Prior to this, government notification FRW.31/99/89, of 27 January 2010 had authorized setting up a committee mandated to destroy rhino horns by burning in full public view and in the presence of press and media. However, the work could not be completed at that time due to legal issues and to meet the demand from the people of Assam to verify the authenticity of the horns. Subsequently in 2016, a committee was set up to examine and re-verify the rhino horns under the custody of the forest department in accordance with notification FRW.93/2015/Pt/628, of 29 July 2016. This committee completed the verification work finding that almost all of the horns in the stockpile were genuine except for a few which were in doubt and were subsequently verified through genetic analysis; very few were fake.

The committee formed by the State government in 2021, prepared a protocol for re-verification of the horns in the stockpile and subsequent destruction of the horns by burning after selecting a few for preservation which were deemed necessary for ongoing legal cases against suspected poachers/smugglers, as well as for academic purposes. To execute the horn re-verification, a single Technical Committee was formed made up of people with a range of relevant expertise. To support the technical committee, seven zonal committees were formed to cover various parts of Assam where most of the rhino horns were stored in high security government treasuries.

The horn re-verification work (Figs. 1, 2 and 3) was

carried out in the different locations by a single technical team and followed a fixed protocol that comprised of the following broad procedures: a) opening of locked boxes holding horns, verifying records and cleaning of the horns; b) physical and microscopic verification; c) issue and printing of new labels for each horn; d) morphometric measurements using tape to determine size and initial weight; e) morphometric scale documentation through photography; f) sample collection for genetic analysis and recording weight; g) recording post-sampling closing

weight; h) packaging of the horn and final labelling; i) re-storing horns and samples in secured boxes; j) proper disposal through burning of any waste matter generated during the exercise.

The entire process was video recorded and there was a live streaming of the re-verification procedure outside the secured room for public viewing.

Once the re-verification of all 2,623 horns was completed, the necessary approvals were accorded for destruction of 2,479 horns by burning and preservation of 94 horns that included a few unique pieces such as the longest and the heaviest on record, (see Tables 1 and 2).



Figure 1. Specially formed team members verifying the rhino horns in their stores in 2021 (© Assam Forest Department).



Figure 2. Rhino horns are categorized and inventoried ahead of the burning exercise on 22 September 2021 (© Assam Forest Department).



Figure 3. The longest horn of the greater one-horned rhinoceros found in Assam (© Assam Forest Department).

Table 1. Some of the findings from the re-verification exercise

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|---|----------|
| Heaviest rhino horn in the stockpile | 3.051 kg |
| Longest standing height recorded in the stockpile | 42.5 cm |
| Average weight of a rhino horn | 560 gm |
| Average basal circumference | 43.47 cm |

Table 2. Profile of two unique horn pieces found during the exercise

| Sl. No. | Uniqueness | Height (cm) | Weight (kg) | Outer curve length (cm) | Inner curve length (cm) |
|---------|------------|-------------|-------------|-------------------------|-------------------------|
| 1 | Longest | 42.5 | 2.57 | 57 | 47 |
| 2 | Heaviest | 36.0 | 3.051 | 50 | 40 |



Figure 4. View of specially made furnaces with burning pyres destroying rhino horn stockpile in Assam (© Assam Forest Department).



Figure 5. “Abode of the Rhinoceros” constructed from the ashes of horns burnt in 2021 and unveiled in September 2022 in Kaziranga National Park. (© Chandana Sarma).

The heaviest horn in the stockpile weighed 3.051 kg, while the longest had an outer curvature length of 57 cm. (See Tables 1, 2, and Fig. 3 above). The latter is most likely the second longest greater one-horned rhino horn presently existing in the world, following the one preserved at the Natural History Museum in London which was also from Assam (a horn of 61 cm, shot by Thomas Briscoe in Assam in 1909, the longest trophy still known to exist, see Rookmaaker 2020).

Upon completion of the re-verification exercise the horns were incinerated at a ceremony held at Bokhat town, close to Kaziranga NP. Following Hindu rituals, the burning of the horns was done in specially designed gas-powered furnaces, by a special Burning Committee with the support of six dedicated teams during a day long programme. All 2,479 horns were arranged in iron trays and placed in six specially designed iron furnaces before being set alight. (Fig. 4) It took around four hours for the horns to completely disintegrate and 157.02 kg of burnt horn ash was later derived from the horns that weighed 1,305.25 kg. Three rhino statues entitled “Abode of the Rhinoceros” and constructed from the ashes of the horns burnt in 2021 were installed and unveiled in September 2022 in Kaziranga NP by Assam Chief Minister Himanta Biswa Sarma. (Fig. 5)

This was the first instance of horn destruction to take place in Assam and is shared for a wider audience through this field note to expand learning.

Acknowledgements

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References

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