

LOTHAL

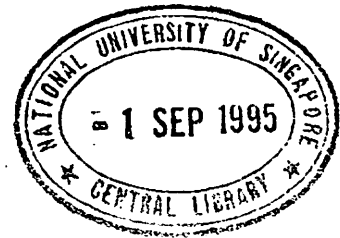
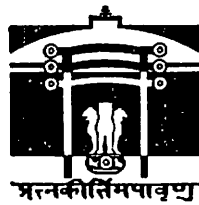
A HARAPPAN PORT TOWN

1955-62

By

S. R. RAO

WITH CONTRIBUTIONS BY PROF. S. S. SARKAR, Dr. B. B. LAL, V. K. CHARI,
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CHAPTER XXIII

ANIMAL REMAINS FROM LOTHAL EXCAVATIONS

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1. INTRODUCTION

This report deals with the animal remains collected from Lothal Excavations during the field seasons of 1955-60.

The total number of bones recovered from Lothal is very large and most of them are fragile and fragmentary in nature. The organic material of the bones has disappeared and they are impregnated with organic material. Some intact and well preserved bones such as vertebrae, cannon bones, carpal and tarsal bones and phalanges have also been recorded. Not even a single complete skull is present among the remains. A number of fragments of this collection which are of no help for identification have been rejected.

The Lothal collection consists of four thousand eight hundred and sixty identified animal remains, represented by 31 species of animals which include 6 invertebrates and 25 vertebrates.

A. INVERTEBRATES

- | | |
|--|---|
| 1. <i>Viviparus bengalensis</i> (Lamarck) race
<i>mandilensis</i> Kobalt. | 4. <i>Olivia ispidula</i> Lamarck. |
| 2. <i>Pila globosa</i> (Swainson). | 5. <i>Xancus pyrum</i> Linnaeus. |
| 3. <i>Telescopium telescopium</i> Linnaeus. | 6. <i>Conus</i> (Rhizoconus) <i>rattus</i> Bruguiere. |

B. VERTEBRATES

- | | |
|--|--|
| 1. <i>A carp Fish.</i> | 14. <i>Axis axis</i> Erxleben. |
| 2. <i>Rita rita</i> (ham. Buch) | 15. <i>Cervus unicolour</i> Kerr. |
| 3. <i>Lissemys punctata</i> (Bonnaterre) forma <i>typica</i> | 16. <i>Cervus duvauceli</i> Cuvier. |
| 4. <i>Chitra indica</i> (Gray). | 17. <i>Boselaphus tragocamelus</i> Pallas. |
| 5. <i>Gallus</i> sp. | 18. <i>Bos gaurus</i> H. Smith. |
| 6. <i>Canis familiaris</i> Linnaeus. | 19. <i>Bubalus bubalis</i> Linnaeus. |
| 7. <i>Canis aureus</i> Linnaeus. | 20. <i>Bos indicus</i> Linnaeus. |
| 8. <i>Herpestes auro-punctatus</i> Hodgson. | 21. <i>Antelope Carvicapra</i> Linnaeus. |
| 9. <i>Elephas maximus</i> Linnaeus. | 22. <i>Capra hircus aegagrus</i> Erxleben. |
| 10. <i>Equus caballus</i> Linnaeus. m | 23. <i>Ovis orientalis vignei</i> Blyth. |
| 11. <i>Rhinoceros uniformis</i> Linnaeus. | 24. <i>Lepus nigricollis</i> Cuvier. |
| 12. <i>Sus scrofa cristatus</i> Wagner. | 25. <i>Rattus rattus</i> Linnaeus. |
| 13. <i>Mumtiacus mumtzak</i> Zimmarmann. | |

The photograph of the horse tooth from Lothal is reproduced on Plate No. CCXCVIII A; 18 and 19.

The remains of horse have also been recorded from Mohenjo-daro, Harappa, Taxila, Rupar and Ujjain.

The measurements of the Lothal specimen along with that of the modern horse tooth (Z.S.I. collection) are given below :—

Measurements (in millimeters)

2nd right upper molar tooth	Lothal specimen	Modern specimen
Length of crown	29	23
Width of the crown	25	25
Length of Protocone	12	12
Length from posterior margin of crown to antecrochet	18	15
Length from posterior margin of crown to anterior lobe of protocone	23	20

Family Rhinocerotidae
Rhinoceros unicornis Linnaeus
 (The Great One-horned Rhinoceros)

Material : One fragment of the mandible comprising the right horizontal ramus and some portion of vertical ramus. From SRG 2; Locus D×9; Stratum 3.

This solitary find of rhinoceros bears a close similarity to that of the modern one-horned rhinoceros specimen in the Z.S.I. collection.

The photographs of this specimen are illustrated on plat No. CCXCVIII B, 21 and 22.

Order Artiodactyle
 Family Suidae
Sus scrofa cristatus Wagner
 (The Indian domestic Pig)

Material : Eight hundred and forty remains of this species have been recorded and these comprise the fragments of skulls, lower jaws, teeth, limb-girdles, limb-bones, ribs and vertebrae.

These remains have been recorded from every layer of the Lothal excavations. Most of the finds are fragmentary in nature except some metacarpals and metatarsals bones and few axial bones. Except an incomplete skull of an young animal no adult skull has been recorded.

The photograph of the incomplete skull of the young one is reproduced on Plate No. CCXCVIII A, 20.

A number of fragments of lower jaws were recovered, some of them bearing teeth. The photograph of a well preserved lower jaw fragment is illustrated on Plate CCXCIX A, 23.

The loose teeth available do not show any specialised peculiarities but they generally resemble with that of the modern domestic pig in the Z.S.I. collection. The photograph of a tusk (canine tooth) is reproduced on Plate No. CCXCIX A, 24.

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The photograph of intact and well preserved At-las vertebra is given on Plate No. CCXCIX A, 25.

The limb bones area mostly fragments but some intact bones such as astragalus, calcaneum, metacarpals and metatarsals are also present. The photographs of calcaneum, astragalus and 4th metacarpal bones along with fragment of the humerus bone are illustrated on Plate No. CCXCIX A, 26 to 29.

The occurrence of a large number of bones of the pig in the entire collection of Lothal animal remains indicates that this animal was one of their favourite domestic animals next to *Bos indicus*.

Family Cervidae
Muntiacus muntzak Zimmermann
(The Barking Deer)

Material : One fragment of rib. From SRG 2; Locus C.21; Stratum 5. One proximal fragment of tibia. From SRG 3; Locus E×8; Stratum Pit by 5.

These two available fragments of the barking deer resemble closely with those of the modern specimen in the Z.S.I. collection.

A photograph of the proximal fragment of tibia is illustrated on Plate No. CCXCIX B, 30.

Axis axis Erxleben
(The spotted Deer).

Material : Eleven fragments belonging to mandible, limb-girdles and limb bones and two intact bones of astragalus and 1st phalanx. From SRG 2; SRG 3; and SRG 5.

The above mentioned remains of the spotted deer are mostly fragments except two intact bones viz. the 1st phalanx and the right astragalus. All these finds show marked resemblance to those of the modern specimen in the Z.S.I. Collection.

The photographs of well preserved 1st phalanx and astragalus are illustrated on Plate No. CCXCIX B 31 and 32.

The presence of the remains of this animal has also been recorded from Mohenjodaro, Hastinapur, Brahmagiri and Nagda.

Cervus unicolor Kerr
(The Sambar)

Material : Two fragments of upper molar teeth and one fragment of lower molar tooth. From SRG 1; Locus XIV-XVIII; Stratum 14. One fragment of 3rd left lower molar tooth. From SRG 2; Locus C 24; Stratum 6: Depth 6'6".

One 3rd left lower molar. From SRG 2; Locus J 10; Stratum 3;

One fragment of right horizontal ramus of mandible with 3rd molar. From SRG 2; Locus B 13; Stratum 4.

One 2nd left lower molar. From SRG 2; Locus B 32; Stratum 3.

One proximal fragment of left scapula. From SRG 2; Locus C×9; Stratum 3; Depth 3'6".

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Pl. CCXCVII B

Gallus Sp.

10. Distal fragment of tarsometatarsus—From SRG 2.

11. Proximal fragment of tibiotarsus—From SRG 2.

Canis familiaris Linn

12. Distal fragment of Left humerus—From SRG 2.

13. Shaft of left humerus without distal and proximal ends, From SRG 2

Canis Aureus Linn.

14. Left calcaneum—From SRG 2.

15. Fragment of left horizontal ramus of mandible. From SRG 2.

Herpestes auropunctatus Hodgson.

16. Right lower jaw (broken)—From SRG 2.

Pl. CCXCVIII A

Elephas maximus Linn.

17. 1st phalax of the 4th digit of hind limb—From SRG 2.

Equus Caballus Linn

18 Lingual view of second right upper molar—From SRG 2.

19 Buccal view of the same.

Sus Scrofa Cristatus Wagner

20. Dorsal view of the incomplete skull of a young one. From SRG 2.

Plate CCXCVIII B

Rhinoceros unipotnid Linn

21. Fragment of right horizontal ramus of mandible (Lateral view).

22. Medial view of the same.

Plate CCXCIX A

Sus Scrofa cristatus Wagner

23. Fragment of right horizontal ramus of mandible From SRG 2.

24. Fragment of right upper tusk—From SRG 2.

25. At-las vertebra—From SRG 2.

26. Right Calcaneum—From SRG 2.

27. Right astragalus—From SRG 2.

28. Left 4th metacarpal—From SRG 2.

29. Distal fragment of left humerus—From SRG 2.

Plate CCXCIX B

Muntiacus muntazak Zimmermann

30. Proximal fragment of right tibia—From SRG 2.

Axis axis Erxl

31. First phalax—From SRG 2.

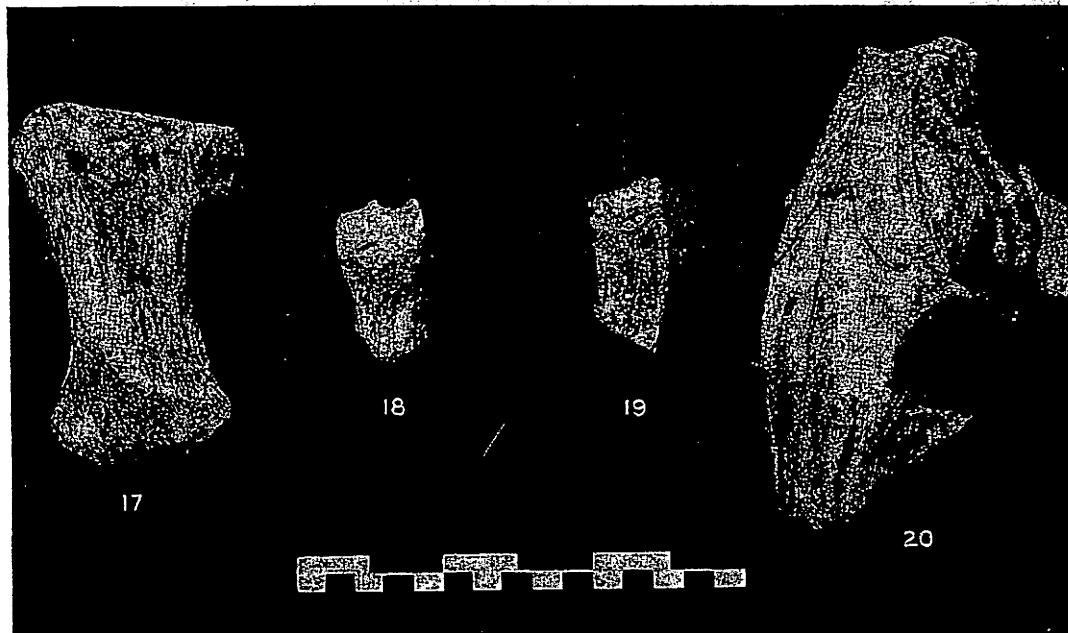
32. Right astragalus—From SRG 2.

Cervus unicolor Kerr.

33. Fragment of right horizontal ramus from SRG 2.

Cervus duvaculi Cuvier.

34. Fragment of antler—From SRG 2.



A



B

A, *Elephas maximus* Linn. *Equus caballus* Linn. *Sus scrofa cristatus wagner* ;
B, *Rhinoceros unicornis* Linn. See pp. 641, 642 and 649