

Pankaj Goyal

List of Publications (updated till 2025)

Books:

1. **Goyal, Pankaj**, Abhayan G.S. and S. Channarayapatna (Eds.) 2023. *Animals in Archaeology: Integrating Landscapes, Environment and Humans in South Asia (A Festschrift for Prof. P.P. Joglekar)*, 2 Volumes. Thiruvananthapuram: Department of Archaeology, University of Kerala.
2. **Goyal, Pankaj** 2021. *Animal-based Subsistence of the Harappan Culture in Gujarat with Special Reference to Kanmer*, South Asian Archaeology Series 5. Osaka, Japan: Research Group for South Asian Archaeology: Archaeological Research Institute, Kansai University.
3. Joglekar, P.P. and **Pankaj Goyal** 2015. *Animal Husbandary and Allied Technologies in Ancient India*. New Delhi: Pentagon Press and Indus-Infinity Foundation.

Articles:

1. Abhayan, G.S., P.P. Joglekar, P. Ajithprasad, S.V. Rajesh, **Pankaj Goyal**, Brad Chase, Jeevan Kharakwal and Prabodh Shirvalkar 2025. Ichthyoarchaeological perspectives on roles of fish and red meat during Indus Civilization in Gujarat, India, *Frontiers in Environmental Archaeology* 4: 1517351. doi: 10.3389/fearc.2025.1517351
2. **Goyal, Pankaj**, Sejal S. Gotad and Abhijit S. Ambekar. 2024. Modified Knucklebones as Gaming Artefacts: Insights from Vadnagar, Heritage: *Journal of Multidisciplinary Studies in Archaeology* 12: 1128-1144.
3. **Goyal, Pankaj**, Sanjay Krishna and Abhijit S. Ambekar. 2024. Investigating Faunal Evidence from Vadnagar: Some Preliminary Observations, Heritage: *Journal of Multidisciplinary Studies in Archaeology* 12: 1343-1356.
4. Deshpande-Mukherjee, Arati, Sushma Deo, Stephania Milano, **Pankaj Goyal**, Sanjay Krishna, Tarannum Caur, Sangita Saini and Jayendra Joglekar 2023-2024. Report on the Recent Excavation of a Shell Midden at Mithakhari in South Andaman, *Journal of Indian Ocean Archaeology* 19-20: 120-135.

5. Deshpande-Mukherjee, Arati, **Pankaj Goyal**, Tarannum Caur, Sanjay Krishna and Atashi Maitra. 2023. Archaeozoological Investigations at Rakhigarhi: An Interim Report, in *New Perspectives on the Harappan Culture in Light of Recent Excavations at Rakhigarhi: 2011-2017, Volume 1, Bioarchaeological Research on the Rakhigarhi Necropolis* (Vasant Shinde, Dong Hoon Shin and Banani Bhattacharyya Eds.), pp. 187-238. Oxford: Archaeopress Publishing Ltd.
6. **Goyal, Pankaj** and Kanchani Prova Koch 2023. Archaeozoology of Northeast India: Retrospect and Prospect, in *Animals in Archaeology: Integrating Landscapes, Environment and Humans in South Asia (A Festschrift for Prof. P.P. Joglekar), Volume 1* (Pankaj Goyal, Abhayana G.S. and S. Channarayapatna Eds.), pp. 99-115. Thiruvananthapuram: Department of Archaeology, University of Kerala.
7. Vaidya, Shantanu and **Pankaj Goyal** 2023. Pramod Prabhakar Joglekar: A Brief Biographical Sketch, in *Animals in Archaeology: Integrating Landscapes, Environment and Humans in South Asia (A Festschrift for Prof. P.P. Joglekar), Volume 1* (Pankaj Goyal, Abhayana G.S. and S. Channarayapatna Eds.), pp. 3-18. Thiruvananthapuram: Department of Archaeology, University of Kerala.
8. Joglekar, Jayendra, **Pankaj Goyal** and Abhayana G.S. 2023. An Annotated Bibliography of Prof. P.P. Joglekar's Research Publications (1986-2022), in *Animals in Archaeology: Integrating Landscapes, Environment and Humans in South Asia (A Festschrift for Prof. P.P. Joglekar), Volume 1* (Pankaj Goyal, Abhayana G.S. and S. Channarayapatna Eds.), pp. 19-76. Thiruvananthapuram: Department of Archaeology, University of Kerala.
9. Vaidya, Shanatnu, Virga Sontakke, Shrikant Ganvir and **Pankaj Goyal** 2023. Observations of the Evidence of Horse Sacrifice from Nagardhan Excavations, District Nagpur, Maharashtra, in *Animals in Archaeology: Integrating Landscapes, Environment and Humans in South Asia (A Festschrift for Prof. P.P. Joglekar), Volume 1* (Pankaj Goyal, Abhayana G.S. and S. Channarayapatna Eds.), pp. 163-169. Thiruvananthapuram: Department of Archaeology, University of Kerala.
10. Deshpande-Mukherjee, Arati and **Pankaj Goyal** 2022. A Potential Early Cattle-based Faunal Economy from the Indus Valley Civilization, in *Cattle and People: Interdisciplinary Approaches to an Ancient Relationship* (Elizabeth Wright and Catarina Ginja Eds.), pp. 63-88. Columbus, GA: Lockwood Press.

11. Joglekar, Jayendra, Shantanu Vaidya, R.K. Mohanty, Sushama G. Deo, **Pankaj Goyal**, P.P. Joglekar and Saumyashree Moharana 2022. Preliminary Observations on Discovery of Middle Palaeolithic Artefacts and Pleistocene Artefacts and Pleistocene Fossils from Khurda District, Odisha, India, in *Adaptations Across Antiquity: Tracing Quaternary Environments and Prehistoric Cultural Responses in Penninsular India* (S.G. Deo, A. Baptista and J. Joglekar Eds.), pp. 265-277. Pune: ISPQS.
12. Patil (Shahapurkar), Maya J., Virag Sontakke, Vilas Wahane, Arati Aley, Jaya Gholwe, Amol Gote, D. Hajare, **Pankaj Goyal**, T. Chase and Amol Kulkarni 2022. A Preliminary Report of Excavations at Ter (Tagar), District Osmanabad, Maharashtra (2014-15), *Man and Environment* XLVII(2): 51-63.
13. Behra, P.K., Sakir Hussain and **Pankaj Goyal** 2021-22. A Report on Investigation at Kapasira, an Iron Age Settlement in the Middle Mahanadi Valley Region of Odisha, *Heritage: Journal of Multidisciplinary Studies in Archaeology* 9: 134-157.
14. **Goyal, Pankaj** 2021. Subsistence and Beyond: Archaeozoological Remains from Kanmer, in *Culture, Tradition and Continuity: Disquisitions in Honour of Prof. Vasant Shinde*, Vol. I (P. Shirvalkar and E. Prasad Eds.), pp. 221-246. Delhi: B.R. Publishing Corporation.
15. **Goyal, Pankaj**, P.K. Behera and Sakir Hussain 2020. Animal-based Subsistence Strategies at Kapasira, An Iron Age Settlement in the Middle Mahanadi Valley of Odisha, *Heritage: Journal of Multidisciplinary Studies in Archaeology* 8.2: 73-99.
16. **Goyal, Pankaj**, P.K. Behera and Sakir Hussain 2020. Continuity and Change in Animal Exploitation at Kantipuleswar, an Iron Age Site in the Middle Mahanadi Valley of Odisha, *Man and Environment* XLV(1): 78-91.
17. **Goyal, Pankaj**, Kantikumar Pawar and Gurudas Shete 2020. Observations on the Faunal Remains Recovered from the Site of Khopadi, District Nagpur, Maharashtra, in *Cultural Heritage of South Asia and Beyond: Recent Perspective* (Vasant Shinde, Shrikant Ganvir and Sayan Bhattacharaya Eds.), pp. 61-76. New Delhi: Research India Press and Society of South Asian Archaeology.
18. Joglekar, P.P. and **Pankaj Goyal** 2020. Animal Remains, in *A Preliminary Report of the excavations at Nagardhan (2015-2016)* (V. Sontakke, S. Ganvir and S. Vaidya Eds.), pp. 86-93. Pune: Indian Society for Prehistoric and Quaternary Studies.

19. Deshpande-Mukherjee, Arati, **Pankaj Goyal**, T. Sreelakshmi, M. Rajesh, Veeraraghavan N., Sanjay Krishna and N. Vinodh 2020. Past Faunal Diversity and Animal Usage Revealed at Gottiprolu, A Southern Satavahana Outpost in SPSR Nellore District of Andhra Pradesh, *Heritage: Journal of Multidisciplinary Studies in Archaeology* 8.1: 38-66.
20. Abhayan, G.S., P.P. Joglekar, **Pankaj Goyal**, S.V. Rajesh, J.S. Kharakwal, Y.S. Rawat and T. Osada 2020. An Ichthyoarchaeological investigation into the Harappan Settlement at Kanmer in Gujarat, India, *Journal of Archaeological Science: Reports* 33: 102547.
21. **Goyal, Pankaj**, P.P. Joglekar and Praveen Kumar K 2020. Bharatiya Upkhandadalli Pasusangopane: Maru Avlokana (in Kannada), *Itihasa Darpana* 44-45: 13-50.
22. Vaidya, Shantanu, R.K. Mohanty, S.K. Patnaik, S.G. Deo, Varad Sabnis, J. Joglekar, **Pankaj Goyal**, K.K. Behera, S. Moharana, R.K. Verma, H. Shekhar, P.K. Jena, D. Chandan Kumar and P.P. Joglekar 2020. Preliminary Report on the Excavations at the Chalcolithic Site of Asurdhipa, Kanchilo Village, District Khurdha, Odisha, *Man and Environment* XLV(2): 34-42.
23. Behera, P.K., Sakir Hussain and **Pankaj Goyal** 2019. Iron Age in the Middle Mahanadi Valley of Odisha, India: Recent Perspectives, *Heritage: Journal of Multidisciplinary Studies in Archaeology* 7: 95-134.
24. Nihildas, N., P. Sonone, B. Thakur, G. Shete and **Pankaj Goyal** 2019. Trial Excavations at Phupgaon: An Iron Age Settlement. Taluka Chandur Bazar, District Amravati, Maharashtra, *Man and Environment* XLIV (1): 52-61.
25. **Goyal, Pankaj**, P. Shirvalkar and Y.S. Rawat 2018. Archaeozoological Finds from Kotada Bhadli, a Late Mature Harappan Site in Gujarat, *Man and Environment* XLIII(2): 67-83.
26. **Goyal, Pankaj** 2017. The Preparation and Discard of Animal Products at Kanmer, *Shodh Patrika* 68(1-2): 52-61.
27. **Goyal, Pankaj**, P.P. Joglekar and Y.S. Rawat 2017. Animal Remains from the Formative Stage of the Settlement at Vadnagar, Mehsana District, Gujarat, in *Rethinking the Past: A Tribute to Professor V.N. Misra* (S.G. Deo, A. Baptista and J. Joglekar Eds.), pp. 202-214. Pune: Indian Society for Prehistoric and Quaternary Studies.

28. **Goyal, Pankaj** and P.P. Joglekar 2017. The Archaeozoological Variability among Harappan Sites in Gujarat, in *Kailashnath Hetu (Essays in Prehistory, Protohistory and Historical Archaeology) Vol. II* (Eds. A. Kumar, Rajesh S.V. and Abhay G.S.), pp. 430-441. Delhi: New Bharatiya Book Corporation.
29. Shah, Suken, Abhijit Dandekar, P.P. Joglekar and **Pankaj Goyal** 2017. Polity and Economy: A Study of the Coinage of the Western Kshatrapas, *Heritage: Journal of Multidisciplinary Studies in Archaeology* 5: 644-655.
30. Haraniya, K., P.P. Joglekar and **Pankaj Goyal** 2016. Osteological Keys for Differentiating among Hind Limb Bones of *Bos indicus*, *Bubalus bubalis* and *Boselaphus tragocamelus*, *Heritage: Journal of Multidisciplinary Disciplinary Studies in Archaeology* 4: 482-502.
31. **Goyal, Pankaj** and P.P. Joglekar 2015. A Brief History of Domestic Animals of the Indian Subcontinent, in *Reflections on the History of Indian Science and Technology* (O.C. Handa Ed.), pp. 41-59. New Delhi: Pentagon Press and Indus-Infinity Foundation.
32. Koch, Kanchani Prova and **Pankaj Goyal** 2015. Ethnoveterinary Practices in Uttarakhand and Their Relevance Today, in *Reflections on the History of Indian Science and Technology* (O.C. Handa Ed.), pp. 154-165. New Delhi: Pentagon Press and Indus-Infinity Foundation.
33. Joglekar, P.P., **Pankaj Goyal** and Gauri Bedekar 2015. Appendix I: Animal Remains, in *Living with Floods: Archaeology of a Settlement in the Lower Ganga Plains c.600-1800 CE* (Sheena Panja, A.K. Nag and S. Bandyopadhyay Eds.), pp. 191-215. New Delhi: Primus Books.
34. **Goyal, Pankaj**, K. Haraniya and V.G. Sontakke 2015. Faunal Remains from the Iron Age Settlement at Malli, Gondia District, Maharashtra, *Man and Environment* XL(1): 54-65.
35. Kshirsagar, S.D., P.D. Sabale, S.V. Joshi and **Pankaj Goyal** 2015. Recent Environmental Archaeological Investigation in Bhima basin of Solapur District of Maharashtra, in *Proceedings of National Conference on Biodiversity, Climate Change and Sustainable Development (29th-30th August, 2015)* (S.A. Nayakawadi and M.R. Abdar Eds.), pp. 4-10. Sangli: Dept. of Zoology, Krantisinh Nana Patil College, Walwe.
36. **Goyal, Pankaj**, P.P. Joglekar and P.K. Behra 2014. The Iron Age Faunal Economy at Badmal, District Sambalpur, Odisha, *Man and Environment* XXXIX(1): 52-61.

37. Vaidya, Shantanu and **Pankaj Goyal** 2014. Transforming the Dead: Social Implications of Horse Remains in Megalithic Burials of Vidarbha, in *The Megalithic Culture of South India* (K.N. Dikshit and Ajith Kumar Eds.), pp. 271-286. New Delhi: Indian Archaeological Society.
38. **Goyal, Pankaj** 2013. Multiple Roles of Cattle in the Harappan Economy at Kanmer, *Heritage: Journal of Multidisciplinary Studies in Archeology* 1: 63-77.
39. **Goyal, Pankaj**, A.K. Pokharia, J.S. Kharakwal, P. Joglekar, Y.S. Rawat and T. Osada 2013. Subsistence system, Paleoecology and ¹⁴C Chronology at Kanmer, A Harappan Site in Gujarat, India, *Radiocarbon* 55 (1): 141-150.
40. Joglekar, P.P. and **Pankaj Goyal** 2013. Animals, in *Protohistoric Foundations Volume II* (Eds. D.K. Chakrabarti and Makkhan Lal), pp. 167-184. Delhi: Vivekananda International Foundation and Aryan Books International.
41. Joglekar, P.P., Anup Mishra, U.P. Arora and **Pankaj Goyal** 2013-15. Animal Remains from Abhaipur, District Pilibhit, Uttar Pradesh, *Pragdhara* 24: 33-52.
42. **Goyal, Pankaj** and P.P. Joglekar 2012. Archaeozoological remains from the Site of Kanmer, in *Excavation at Kanmer 2005-06 – 2008-09 (Kanmer Archaeological Research Project: An Indo-Japanese Collaboration)* (J.S. Kharakwal, Y.S. Rawat and Toshiki Osada Eds.), pp. 767-794. Kyoto, Japan: Research Institute for Humanity and Nature.
43. Vaidya, Shantanu and **Pankaj Goyal** 2012. Men and Horses in the Megalithic Culture of Vidarbha, *Kosala* 5: 238-248. (ISSN 2229 4546)
44. **Goyal, Pankaj** and P. P. Joglekar 2011. Report on the faunal remains recovered from Kanmer, during the third field season (2007-08), in *Linguistic, Archaeology and the Human Past: Occasional Paper 5* (Eds. Toshiki Osada and Akinori Uesugi), pp. 105-128. RIHN: Kyoto, Japan. (ISBN No. 978-4-902325-61-4)
45. Joglekar, P.P. and **Pankaj Goyal** 2011. Faunal Remains from Shikarpur, a Harappan Site in Gujarat, India, *Iranian Journal of Archaeological Studies* 1(1): 15-25.
46. Agrawal, D.P. and **Pankaj Goyal** 2011. Hospitals in Ancient India, *Ghadar Jari Hai* V(1): 18-23.

47. **Goyal, Pankaj** and P.P. Joglekar 2010. Report on the faunal remains recovered from Kanmer, Gujarat, during the second field season (2006-07), in *Current Studies on the Indus Civilization Volume III* (Toshiki Osada and Akinori Uesugi Eds.), pp.25-43. RIHN-Manohar Indus Project Series: New Delhi.
48. Joglekar, P.P. and **Pankaj Goyal** 2010. Faunal Remains from Jaidak: A Sorath Harappan Site in Gujarat, *Man and Environment* XXXV(1): 76-86.
49. Joglekar, P.P., Sheena Panja, Gauri Bedekar and **Pankaj Goyal** 2010. Animal Remains from the 'Medieval' Phase at Balupur, Malda District, West Bengal, *Puratattva* 40: 135-147. (ISSN No. 0970-2105)
50. Agrawal, D.P., J.S. Kharakwal, Y.S. Rawat, T. Osada and **Pankaj Goyal** 2010. Redefining the Harappan Hinterland, *Antiquity (Project Gallery)* 84(323): 1-2.
51. **Goyal, Pankaj** and P.P. Joglekar 2008. Report on the faunal remains recovered from Kanmer, Gujarat, during the second field season (2006-07), in *Linguistic, Archaeology and the Human Past: Occasional Paper 5* (Eds. Toshiki Osada and Akinori Uesugi). Pp. 25-43. RIHN: Kyoto, Japan.
52. Agrawal, D.P., **Pankaj Goyal** and Neer Prabha Negi 2003-04. Traditional Knowledge Systems and Architecture of Uttaranchal, *Puratattva* 34: 138-144.

Book Reviews:

1. **Goyal, Pankaj** 2022. Review of '*Planet, Plants and Animals: Ecological Paradigms in Buddhism*' by Anand Singh, in *Man and Environment* XLVII(2): 95-96.
2. **Goyal, Pankaj** 2014. Review of '*Guhiyapal Excavation Report: 2003-2004*' by Ajit Kumar Prasad, Amitabh Kumar and Satyendra Kumar Jha, in *Man and Environment* XXXIX(2): 91-92.
3. **Goyal, Pankaj**. 2013. Review of '*Heritage: Palaeontological and Iconographical Aspects*' by G.L. Badam and Rahman Ali, in *Man and Environment* XXXVIII (2): 111-112.
4. **Goyal, Pankaj** and P.P. Joglekar 2009. Review of '*Ways of Understanding the Human Past: Mythic, Epic, Scientific, and Historic*' by D.P. Chattopadhyaya, in *Annals of the Bhandarkar Oriental Research Institute* 2008 Vol. LXXXIX: 181-184.

5. Agrawal, D.P. and **Pankaj Goyal** 2003. Review of '*Tradition and Innovation in the History of Iron Making*' by Girija Pande and Jan af Geijerstam, in *Man and Environment* XXVII(I): 93-97.

Popular Essays on Website:

- Pankaj Goyal. *Story of Glass in India and world*.
<http://www.indianscience.org>
- Pankaj Goyal. *Ancient Crop Protection Practices: Their Relevance Today*.
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On Website (Review):

- D.P. Agrawal & Pankaj Goyal. Review of *Tradition and Innovation in the History of Iron Making*. [http://www.indianscience.org/
www.infinityfoundation.com](http://www.indianscience.org/www.infinityfoundation.com)