

Limestone infused soil: Does limestone affect faunal preservation in the ground?

Katherine Martychenko

Factors Affecting Taphonomy/Decomposition

1.pH level

2.Insects

3.Fungi

4.Exposure

5.Heat treatment



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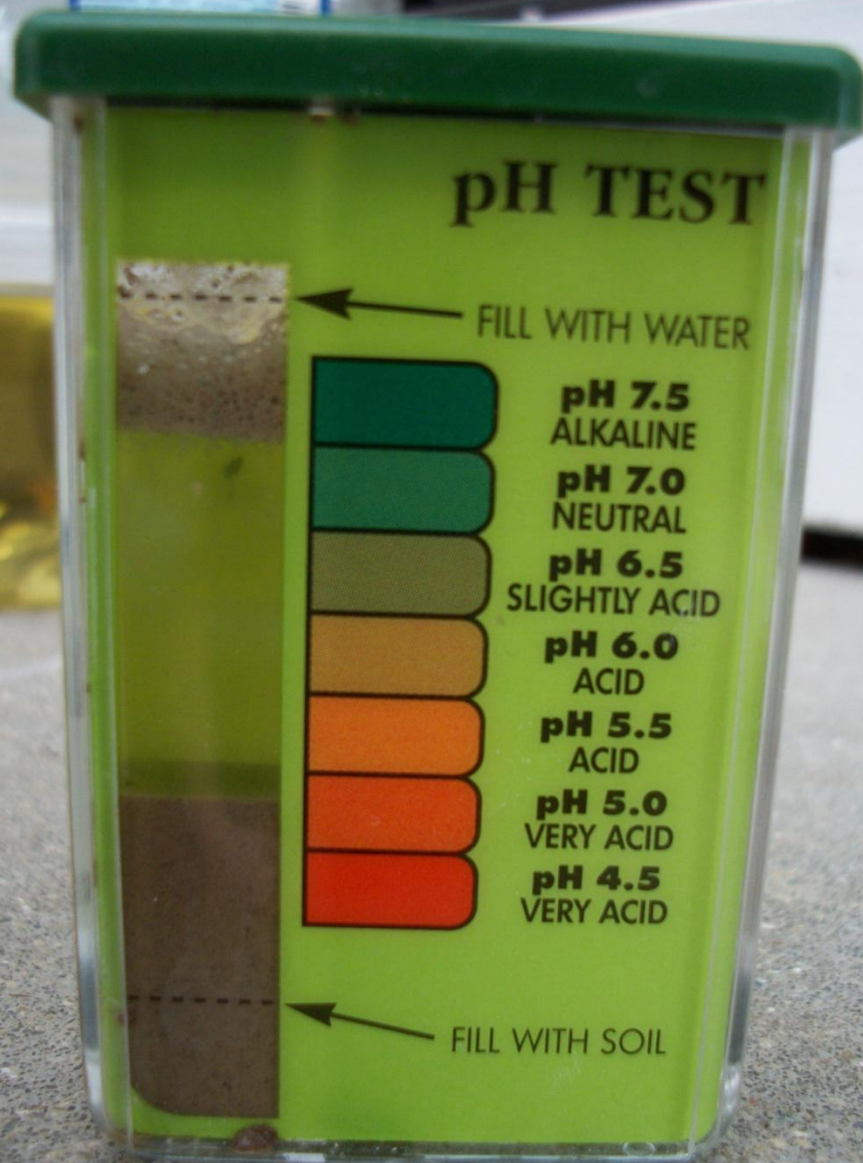
Preparing the bones



Preparing the pits



Home pH Test kit





Stage	Presence of Soft Tissue	Cracking/Flaking
0	Marrow, greasy bone, soft tissue may be present	No cracking or flaking
1	Soft tissue may be present	Parallel cracking on long bones, mosaic cracking on articular surfaces
2	Remnants of soft tissue maybe present	Thin layers of bone flaking to deeper extensive flaking, loss of outer most bone
3	Soft tissue rare	Patches of rough, weathered compact bone, fibrous texture, weathering no deeper than 1.0-1.5 mm
4	Tissue extremely unlikely	Surface rough and coarsely fibrous, weathering in inner cavities, splintering, open cracks with splintered or rounded edges
5	Tissue extremely unlikely	Falling apart, large disarticulated splinters, fragile, falling apart,



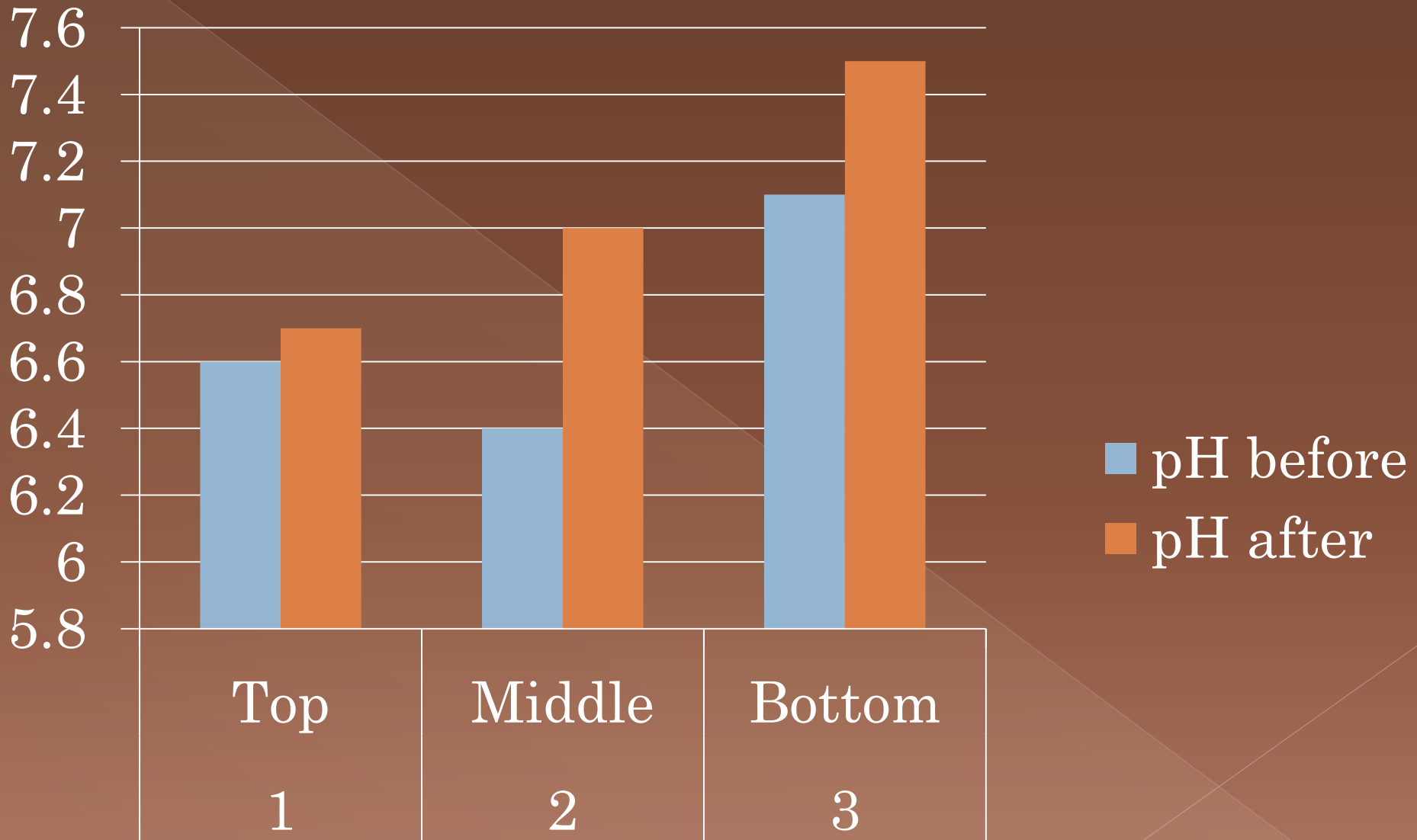


Sample	Location	Pit	Limestone	pH before	pH after	Ca % before	Ca % after
1	Top	A	None	6.6	6.7	51.3	50.4
2	Top	B	Yes	6.6	6.7	51.6	54.4
3	Middle	A	None	6.6	6.5	35.8	44.3
4	Middle	B	Yes	6.4	7	33.6	58.7
5	Bottom	A	None	6.9	6.8	44.9	53.1
6	Bottom	B	Yes	7.1	7.5	45.8	73.6

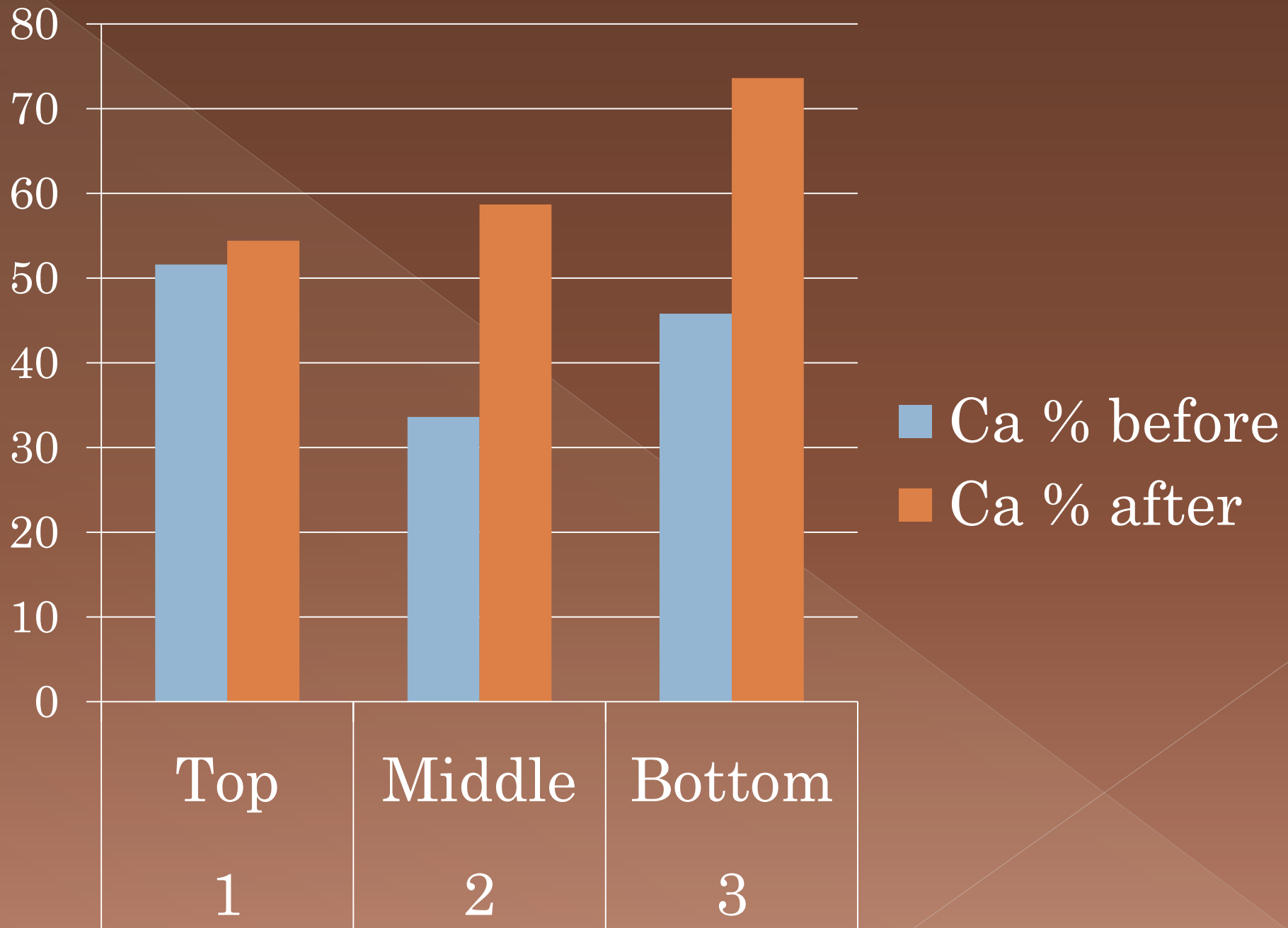
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Pit B (Limestone infused)



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Problems with Experiment and Results

- Too short duration of time??
- Inconsistent position of bones within bundles
- Inconsistent exposure to maggots



Acknowledgments

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