

The History of Archery - a Conference Lecture. & Accompanying Appendix.

Stephen F. Wyley



Figure 1. Archers practicing at the earthen butts from the Luttrell Psalter. Note butts at either end of would reduce amount of walking between ends.

Acknowledgements; Thanks to Christopher Morgan and Steven Baker for their input.

History Time Line (from Alt-Archery).

35,000 - 8,000 BC	Archery developed simultaneously in a number of different locations.
9,000 BC	Arrow shafts found in Germany.
6,000 BC	First extant self bow found.
8,000 - 3,200 BC	Bows found in Denmark exhibit tillering (Nydal?).
2,500 BC	Akkadians conquered Sumeria using infantry archers.
1500 - 1027 BC	Crossbows mentioned for the first time in China (Shan Dynasty).
1200 - 700 BC	Assyrians used archers in chariots, also used three types of archers; light, medium and heavy depending on the amount of armour worn. Some mounted archers were also used.
550 BC	Persian infantry archers using reflexed and probably composite bows with long ears.
360 BC	Phillip and Alexander of Macedonia used archers as support for heavy cavalry.
260 BC	Hannibal used both light and heavy mounted archers.
53 BC	Parthian's army consisting of all cavalry using composite bows overcame the invading Roman Army.
206 - 220 AD	Crossbows in common use during the Han Dynasty for guarding the Great Wall.
432 AD	Hunnish horse archers attack Roman Empire.
500 - 900 AD	Byzantines used mounted archers followed by cavalry charge.
900 - 1400 AD	Reverted to infantry archers.

1066 AD	Saxons beaten by the Norman combination of infantry archers and cavalry.
1099, 1147 - 1149, 1189 - 1192 AD	The Crusaders came up against horse archer. Richard died from the infection from a crossbow bolt wound.
1208 AD	Genghis Khan using principally horse archers created the Mongol Empire.
1252 AD	The Assise of Arms listed the bow as a warlike arm and all males between 15 and 60 were ordered to be equipped with a bow.
1346 AD	Crecy.
1356 AD	Poiters.
1377 AD	Piers Plowman refers to Rymes of Robyn Hode.
1415 AD	Agincourt.
1450 AD	Genoese made a bow with steel limbs.
1508 AD	Crossbows were forbidden in England in an attempt to increase the use of the longbow (repealed 1536).
1595 AD	In England all bows ordered to be exchanged for muskets.
1644 AD	Tipper Muir - Last war with English Archers.

Web site; <Ftp://rtfm.mit.edu/pub/usenet/alt.archery>



Figure 2. Norman Archers from the Bayeux Tapestry, archer in lower left corner only archer wearing armour and archer in top left corner is the only archer to wear a quiver in the shoulder position.

Video Presentation.

The History of Archery, Running Wolf Productions, P.O. Box 916, London, SE161 EH, England.

Archery Organizations.

British Longbow Society.

Secretary, H.D. Soar, 65 Chiltern Close, North Common, Warmley, Bristol BS15 5UL, England.

Mary Rose Trust.

College Road, HM Naval Base, Portsmouth PO1 3LX, England, ph; 0705 750521, fax; 0705 870588

Simon Archery Foundation.

The Manchester Museum, The University of Manchester, Oxford Road, Manchester M13 9PL, England.

Society of Archer-Antiquaries.

Web site: <http://snt.student.utwente.nl/~sagi/artikel/saa/saaflder.html>

Secretary; D. Elmy, 61 Lambert Road, Bridlington, East Yorks YO16 5RD, England.

Australian Representative; Peter Rashleigh, 43 Osborne Terrace, Plymton, South Australia, 5038.

Archery Suppliers.

Archery Academy, Arrow shafts, etc., 19 Ferry Avenue, Melrose Park. S.A., 5039, ph; (08) 8276 1425.

Arrow Archery, Bow Stave (Yew and Lemonwood), Arrow shafts, etc,
366 Marion Road, Plympton, South Australia, 5038, ph; (08) 8293 3046

Bows, Arrows and Bits, 14 Watton St. Werribee, Victoria, 3030, ph; (03) 9741 5730

The Bow Hut - 296 Waverley Road, Malvern East, Victoria, 3145, ph; (03) 9571 4277 Contact; Ron Tyrrel.
Services; Arrow fletching, Perks Bows, String making, etc.

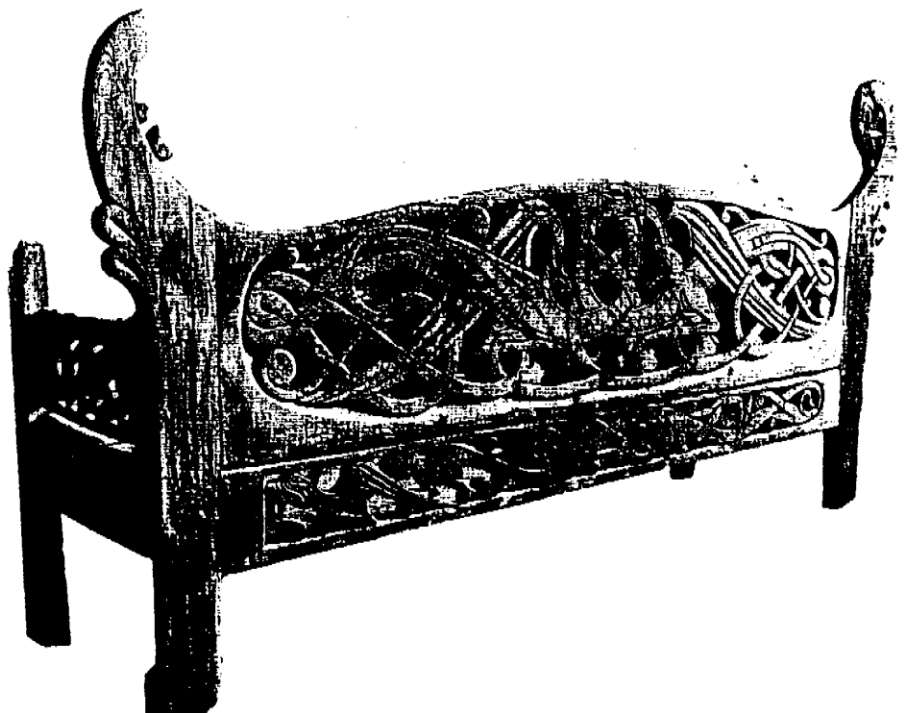
Christopher Morgan, 152 Tenth Avenue, Austral, NSW, 2171, ph; A/H (02) 606 9240, Arrowsmith.

Turbow, Cliff Turpin, Self bows, quivers, strings, 1434 Gympie Road, Aspley, Qld, 4034, Mobile; 018 737 100.

Stephen Wyley, P.O. Box 265, Kew East, Victoria, 3102, ph; A/H (03) 9859 7359, Arrowsmith, Projectile
Combat Helms, blunts and tape.

The Kungsåra bench

38 ■ This early twelfth-century bench from Kungsåra Church in Sweden was probably carved for a local lord or prince. Only the back, which would have faced the rest of the congregation, has been decorated.



Appendix 1.

Bibliography of Archery.

Abbreviations

<i>AJ</i>	<i>Antiquaries Journal.</i>
<i>Bt A</i>	<i>British Archer.</i>
<i>Ed.</i>	<i>Edited.</i>
<i>EHR</i>	<i>English Historical Review.</i>
<i>HT</i>	<i>History Today.</i>
<i>Inst.</i>	<i>Institute.</i>
<i>JSAA</i>	<i>Journal of the Society of Archer Antiquaries.</i>
<i>n.d.</i>	<i>no date.</i>
<i>Proc.</i>	<i>Proceedings.</i>
<i>Soc.</i>	<i>Society.</i>
<i>Trans.</i>	<i>Translated.</i>

Ascham, Roger, *Toxophilus*, Ed. E. Arber, London, 1868.
 Beith, Maj Gen J.H., *The Royal Company of Archers*, Blackwood.
 Bergman, C.A., et al, *Experimental Archery: Projectile Velocities and Comparison of Bow Performances*, *Antiquity*, Vol. 62, No. 237, pp. 658-670, December 1988.
 Bilson, F.L., *Modern Archery*, London, 1949.
 Blackmore, H.L., *Hunting Weapons*, Barrie & Jenkins.
 Bradbury, J., *The Medieval Archer*, Suffolk, 1992.
 Brown, R.C., 'Observations on the Berkhamstead Bow', *JSAA*, x, 1967, pp. 12-15.
 Burke, E., *The History of Archery*, London, 1958.
 Chenevix Trench, C., *A History of Marksmanship*, Longman.
 Clark, J.G.D., 'Neolithic Bows From Somerset, England, and the Prehistory of Archery in North-West Europe', *Proc. Prehistoric Soc.*, xxix, December 1963, pp. 50-98.
 Cottrill, F., 'A Medieval Description of a Bow and Arrow', *AJ*, xxiii, 1943, pp. 54-5.
 Duff, J., *Bows and Arrows*, Macmillan, New York.
 Edwards, C.B., *The Tox Story*, Royal Tox Society.
 Elmer, R. & Smart, C.A., *The Book of the Longbow*, Doubleday.
 Elmer, R.P., *Target Archery*, 1952.
 Faris, N.A., & Elmer, R.P. [Trans. & Ed.], *Arab Archery - An Arab manuscript of about A.D. 1500, 'A Book on the Excellence of the Bow and Arrow' and the Description Thereof*, Princetown University Press, 1945.
 Featherstone, D., *Bowmen of England*, New English Library.

Foley, V., Palmer, G., & Soedel, W., 'The Crossbow', *Scientific American*, cclii, 1985.
 Ford, H.A., *Archery: Its Theory and Practice*, 1856. [Three editions and reprinted as 'The Theory and Practice of Archery, revised and rewritten by William Butt in 1887']
 Gallice, H., *L'Art d' Archerie*, Renouard.
 George, H.B., 'The Archers at Crécy', *EHR*, x, 1895, pp. 733-8.
 Gilbertson, E., *Japanese Archery and Archers*, Trans. Japanese Society, London, 1897.
 Gordon, H. & Webb, A., 'The Hedgeley Moor Bow at Alnwick Castle', *JSAA*, xv, 1972, pp. 8-9.
 Grimley, G., *The Book of the Bow*, Putnam.
 Hamm, J., *Bows and Arrows of the Native Americans*.
 Hansard, G.A., *The Book of Archery*, Longman, London, 1841.
 Hardy, R., *Longbow*, Cambridge, 1976.
 Hare, K., *The Archer's Chronicle*, Williams & Norgate.
 Hargrove, A.E., *Anecdotes of Archery*, Hargrove's Library.
 Harmuth, E., *Die Armbrust [The Crossbow]*, Graz, Austria, 1975.
 Harmuth, E., *Belt Spanners for Crossbows*, Arts, Arms & Armour, An International Anthology, Volume 1, 1979-1980, Ed. Robert Held.
 Harris, P.V., 'Archery in the First Half of the Fourteenth Century', *JSAA*, xiii, 1970, pp. 19-21.
 Harris, P.V., 'The Influence of Robin Hood on Archery', *JSAA*, xv, 1972, pp. 10-14.
 Harris, P.V., 'The Longbow in Battle', *Bt A*, iv, 1953, pp. 183-4.
 Harrison, A.P., *The Science of Archery Showing its Affinity to Heraldry*, London, 1834.

- Hastings, T., *The British Archer*, London, 1831.
- Hatto, A.J., 'Archery and Chivalry: A Noble Prejudice', *Modern Language Review*, xxxv, 1940, pp. 40-54.
- Heath, E.G., *Archery The Modern Approach*, London 1966.
- Heath, E.G., *The Grey Goose Wing*, Reading, 1971.
- Heath, E.G., 'Agincourt', *JSAA*, ix, 1966, pp.7-9.
- Heath, E.G., 'The English Medieval War Arrow', *JSAA*, iii, 1960, pp.17-9.
- Hickman, C.N., Velocity and acceleration of arrows. Weight and efficiency as affected by backing the bow, *Journal Fracklin Inst.* No. 208, October 1929, pp. 521-37.
- Hickman, C.N., The Dynamics of the bow and arrow, *Journal Applied Physics*, vol. 8, June 1937, pp. 404-409.
- Hodgkin, A.E., *The Archer's Craft*, 1974.
- Klopsteg, P.E., The Physics of bows and arrows, *Am J Phys*, vol 11, August 1943, pp. 175-192.
- Klopsteg, P.E., *Turkish Archery and Composite Bow*, 1934. [Second Edition and republished 1947]
- Lake, F.H. & Wright, M.F., *A Bibliography of Archery*, Manchester, 1974
- Legge, M.D., 'The Unerring Bow', *Medium Aevum*, xxv, 1956, pp.79-83.
- Lloyd, E.M., 'The "Herse" of Archers at Crécy', *EHR*, x, 1895, pp. 538-41.
- Longman, C.J., & Walrond, H., *Archery*, Badminton Library of Sports and Pastimes ed. Duke of Beaufort, London, 1894.
- Luttrell Psalter, ed, E.G.Millar, London, 1932.
- McEwan, E., et al, Early bow design and construction, *Scientific American*, June 1991, pp. 50-56.
- McGuffie, T.H., 'The Long-bow as a Decisive Weapon', *HT*, v, 1955, pp 737-41.
- McLeod, W., 'An Ancient Treatise of Military Archery', *JSAA*, v, 1962, pp.10-11.
- Milliken, E.K., *Archery in the Middle Ages*, London 1967.
- Morris, J.E., 'The Archers at Crécy', *EHR*, xii, 1897, pp. 427-36.
- Morse, E.S., Ancient and Modern Methods of Arrow Release. *Bul. Essex Inst.*, 1885.
- Morse, E.S., Additional Notes on Arrow Release, Peabody Museum, Salem, 1885.
- Morsely, W.M., *An Essay on Archery*, Worcester, 1717.
- Oxley, J.E., *The Fletchers and Longbowstringmakers of London*, London, 1968.
- Payne-Gallwey, Sir R., *Projectile Throwing Engines with a Treatise on the Turkish and other Oriental bows*, London, 1907.
- Payne-Gallwey, Sir R., *The Crossbow, Medieval and Modern Military and Sporting. Its Construction, History and Management, with a treatise on the Balista and Catapult of the Ancients*, London, 1958.
- Pope, S.P., *Bows and Arrows*, University of California, Berkely, California, n.d.
- Pope, S.T., *Hunting with Bows and Arrows*, James H. Barry & Co., 1923. [Reprinted 1925, 1928, 1930, 1947]
- Rausing, G., *The Bow: Some Notes on its Origin and Developement*, 1967
- Rees, G., The Longbow's deadly secrets, *New Scientist*, 5th June 1993, pp. 24-5.
- Roberts, T., *The English Bowman, Tracts on Archery*, London, 1801.
- Rule, M., *The Mary Rose*, 2nd edn., London, 1983.
- Schuyler, K.C., *Archery*, Barnes.
- Scoffern, J., *Projectile Weapons of War and Explosive Compounds*, 3rd edn, London, 1858.
- Stein, H., *Archers d'autrefois, archers d'aujourd'hui*, Longuet.
- Stone, G.A., *A Glossary of the Construction, Decoration and Use of Arms and Armour in all Countries and all times*, 1962.
- Switsur, R., 'The Prehistoric Longbow from Danny, Scotland', *Antiquity*, xlviii, 1974, pp. 56 -8.
- Tan-Chuing, T., *Investigative Report on Bow and Arrow Manufacture in Chengtu*, *Journal of Chinese Art History*, Vol. 11 July 1981.
- Tarassuk, L. & Blair, C.[Ed], *The Complete Encyclopedia of Arms and Weapons*, 1979.
- Thompson, M., *The Witchery of Archery*, 1878. [Second Edition, 1879, and reprinted in 1928]
- Tucker, W.E., 'Bows of the Nydam Galleys', *JSAA*, i, 1958, pp.7-9.
- Waateringe, V.W.G., *Die Lederfunde von Haithabue (The Leatherfinds of Haithabu)* including quivers, *Berichtung über die Ausgrabungen in Haithabu* 21, 1984.
- Wales, Gerald of, *The Journey Through Wales and the Description of Wales*, ed. L.Thorpe, Harmondsworth, 1978.
- Waring, T., *Treatise on Archery*, 1877.
- Wegraeus, E., *Die Pfeilspitzen von Birka (The Arrowheads of Birka)*, Birka II: Greta Arwidsson [Ed], Stockholm, 1986.