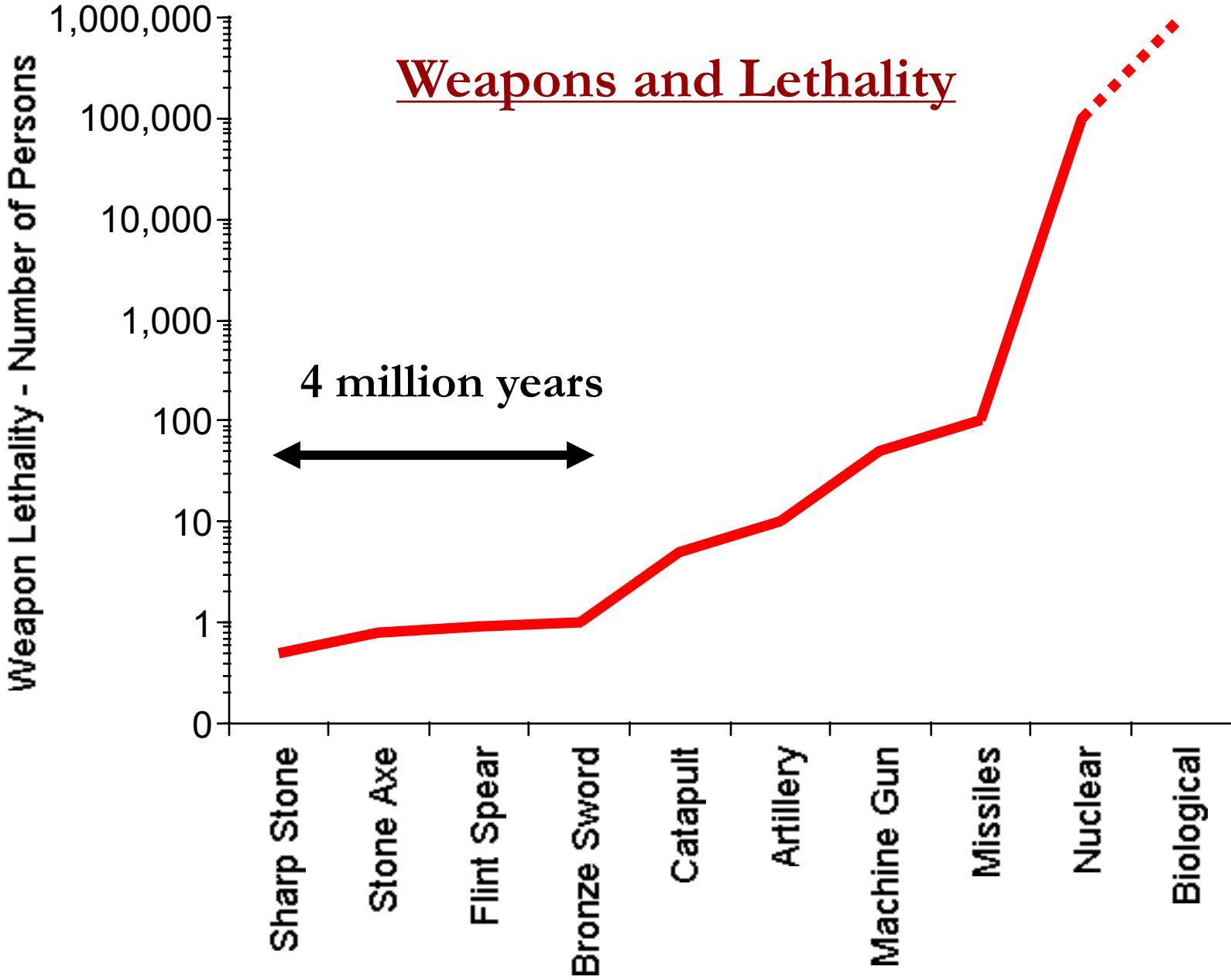


Development of Stone Age Weapons

Paul A. Strassmann <paul@strassmann.com>

Talk to Troop #70, Boy Scouts of America, New Canaan, CT.

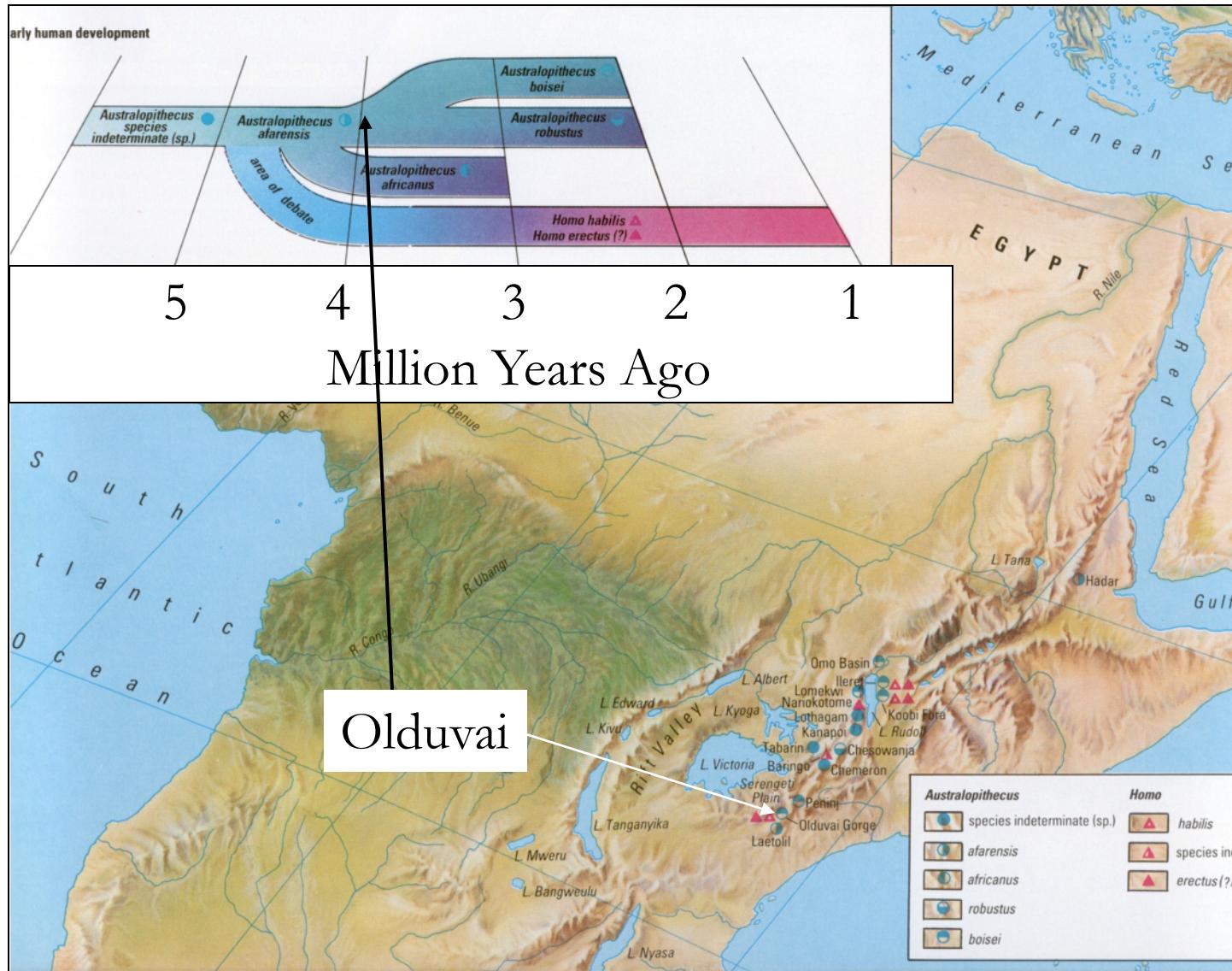
November 8, 2000



Weapons and Lethality

4 million years

Origins of Mankind

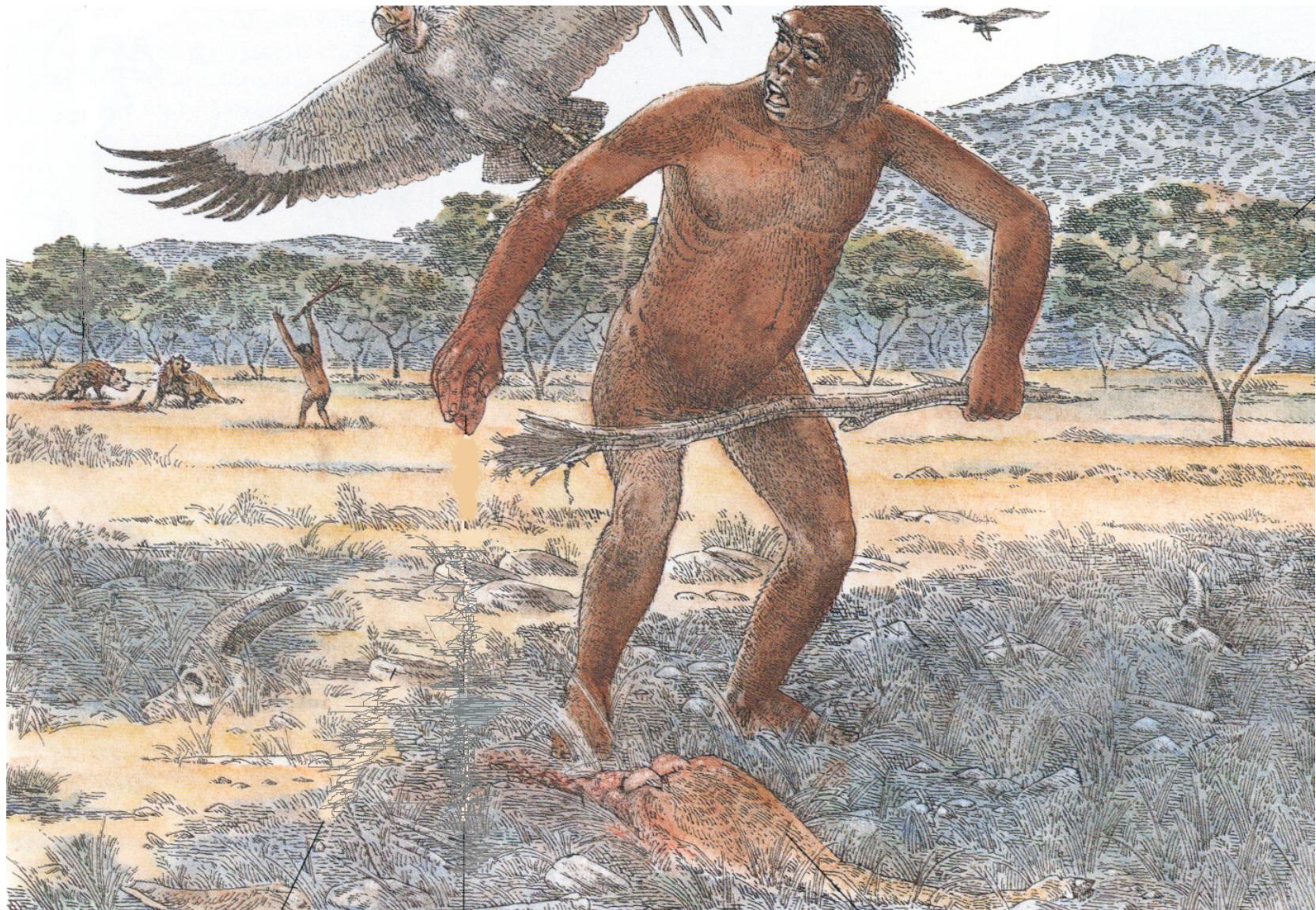


Earliest Known Artifact – Olduvai cca. 4 million years ago



From Strassmann Collection

Anthropologist's Concept Drawing of Olduvai Man



Neanderthal Tools – 100,000 to 35,000 year ago



Flake



Chopper



Hand ax for general cutting and chopping



Sidescraper, possibly for preparing hides



Blade (top),
backed blade (center),
and burin (bottom)



Diskoid



Point

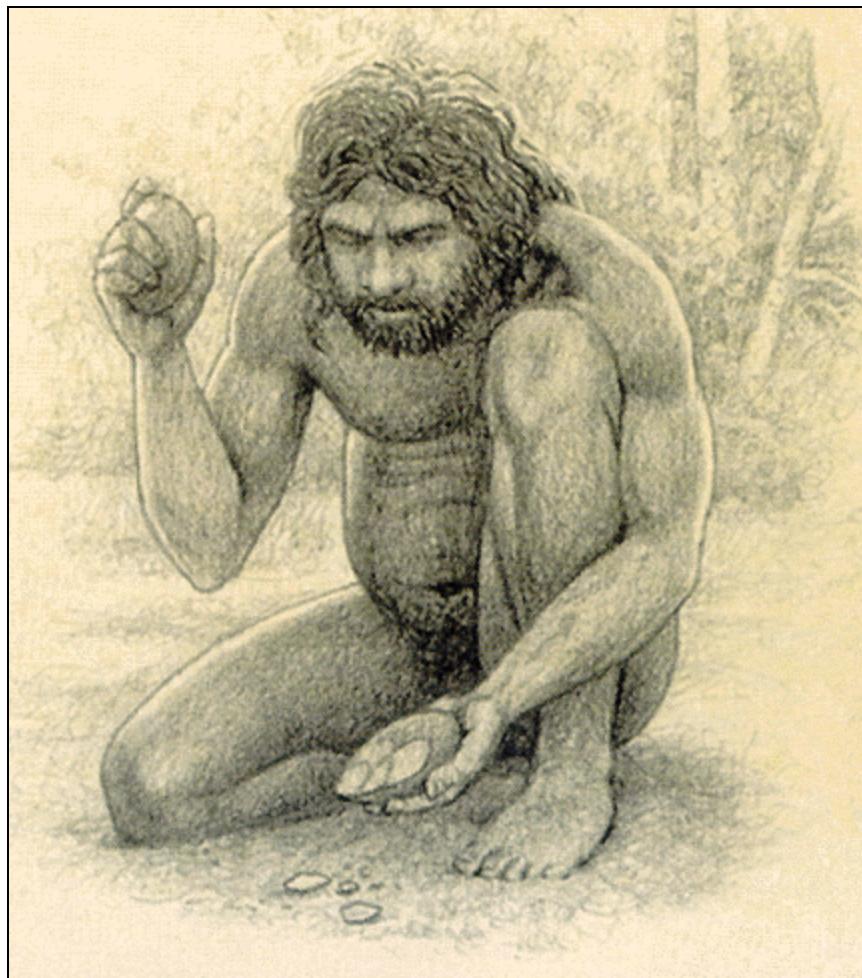


Endscraper

NEANDERTHAL TOOLKIT

Whereas *Homo erectus* made tools largely as necessary, *H. sapiens* made a range of implements for a variety of specialized tasks, as shown by this early “toolkit.”

Neanderthal Tool Maker

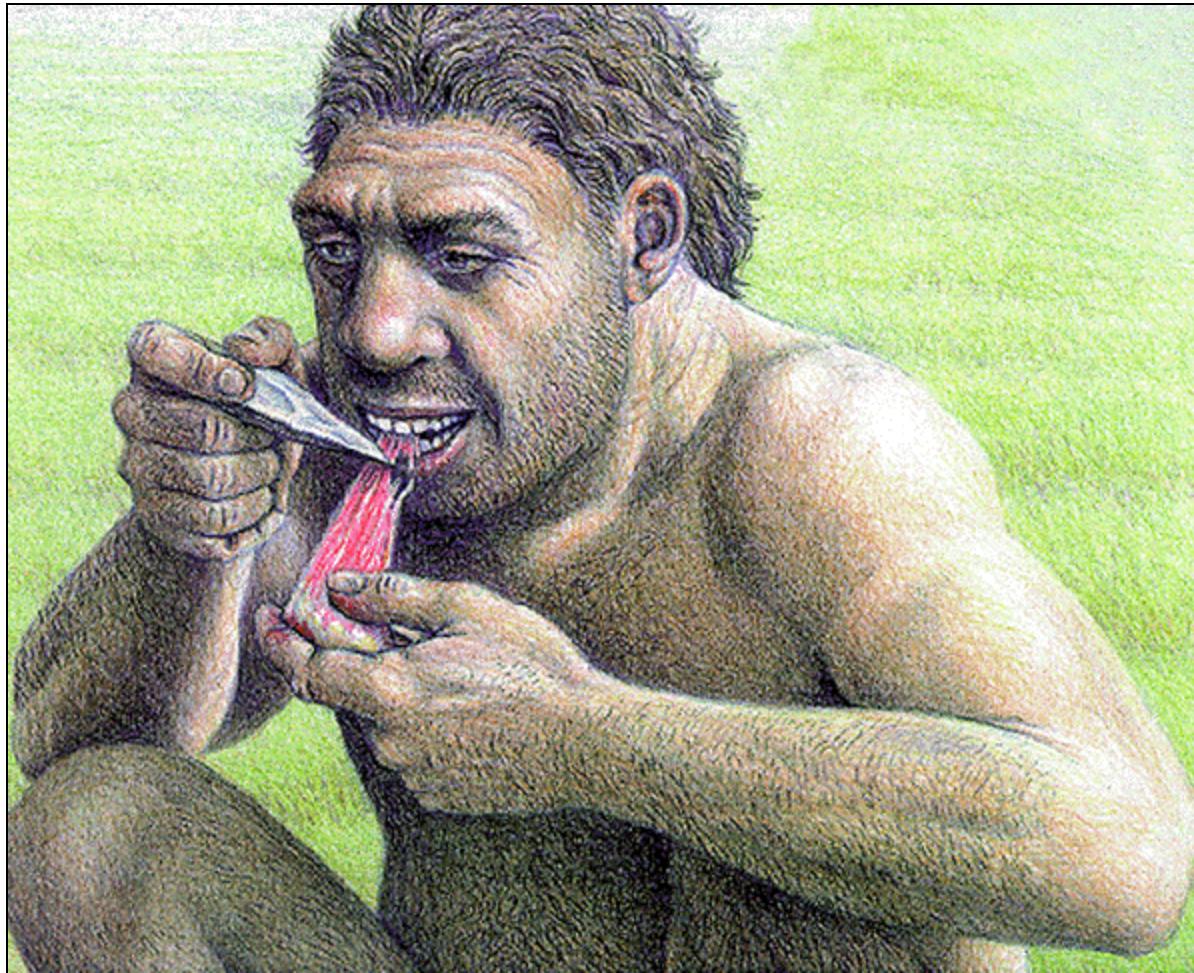


Flinstone Cutting Tool – cca 50,000 years ago



From Strassmann Collection

Flint Skin Scraper & Knife – Jericho, cca.25,000 years ago



Stone Ax: Archeological Find and Modern Reproduction



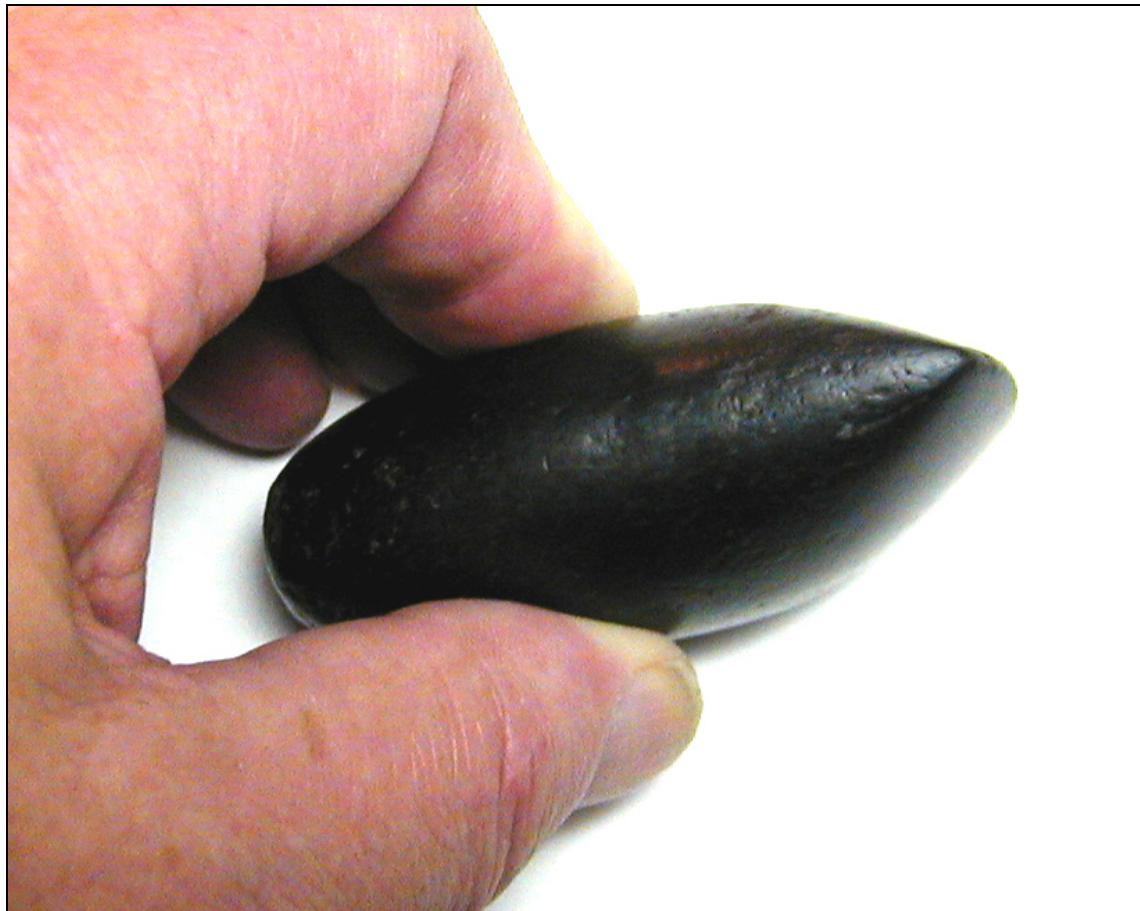
Basalt Axe – Egypt – cca. 12,000 BC



← →
3 in

From Strassmann Collection

Basalt Axe – Side View – Egyptian, cca 12,000 BC



From Strassmann Collection

Battle Axe – Probably Persian, 10,000 years ago



From Strassmann Collection

Bow Drill For Making Fire and Grinding Holes into Stone



Hematite Mace Head – Upper Egypt-Sudan, cca. 8000 BC



2.5 in

From Strassmann Collection

Front View of Hematite Mace Head



From Strassmann Collection

Spear Heads and Attachment to Lance with Sinews



Hunter with Stone Spear Head



Bronze Spearhead – Babylonian, cca. 600 BC



From Strassmann Collection

Side View of Babylonian Bronze Spearhead



From Strassmann Collection

Assyrian Swords – CCA 550 B.C.



Chinese Bronze Battle Axe – About 300 B.C.



From Strassmann Collection

Top View of Mass Produced Bronze Battle Ax – 300 B.C.



From Strassmann Collection

Babylonian Cavalry Sword – Probably 350 B.C.



From Strassmann Collection

Settlement of America

25,000 – 10,000 BP



Examples of Early American Tools – 25,000 to 10,000 old



Flint Arrowhead – 25,000 to 10,000 years old



Flintstone Knife in Deer Handle – Early American (Reproduction)



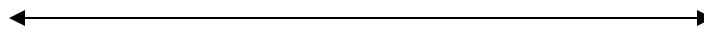
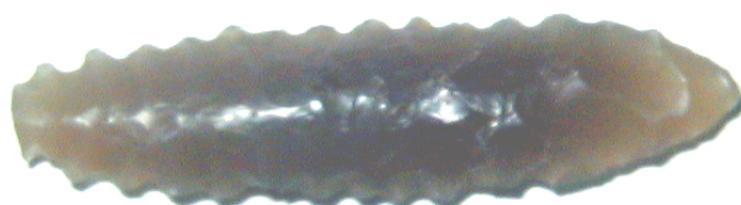
From Strassmann Collection

Edge View of Flint Knife



From Strassmann Collection

Serrated Spearheads – NorthWest America, cc. 5,000 BC



1.2 inches

Arrowheads



American Indian
Arrowhead – 16th Century A.D.

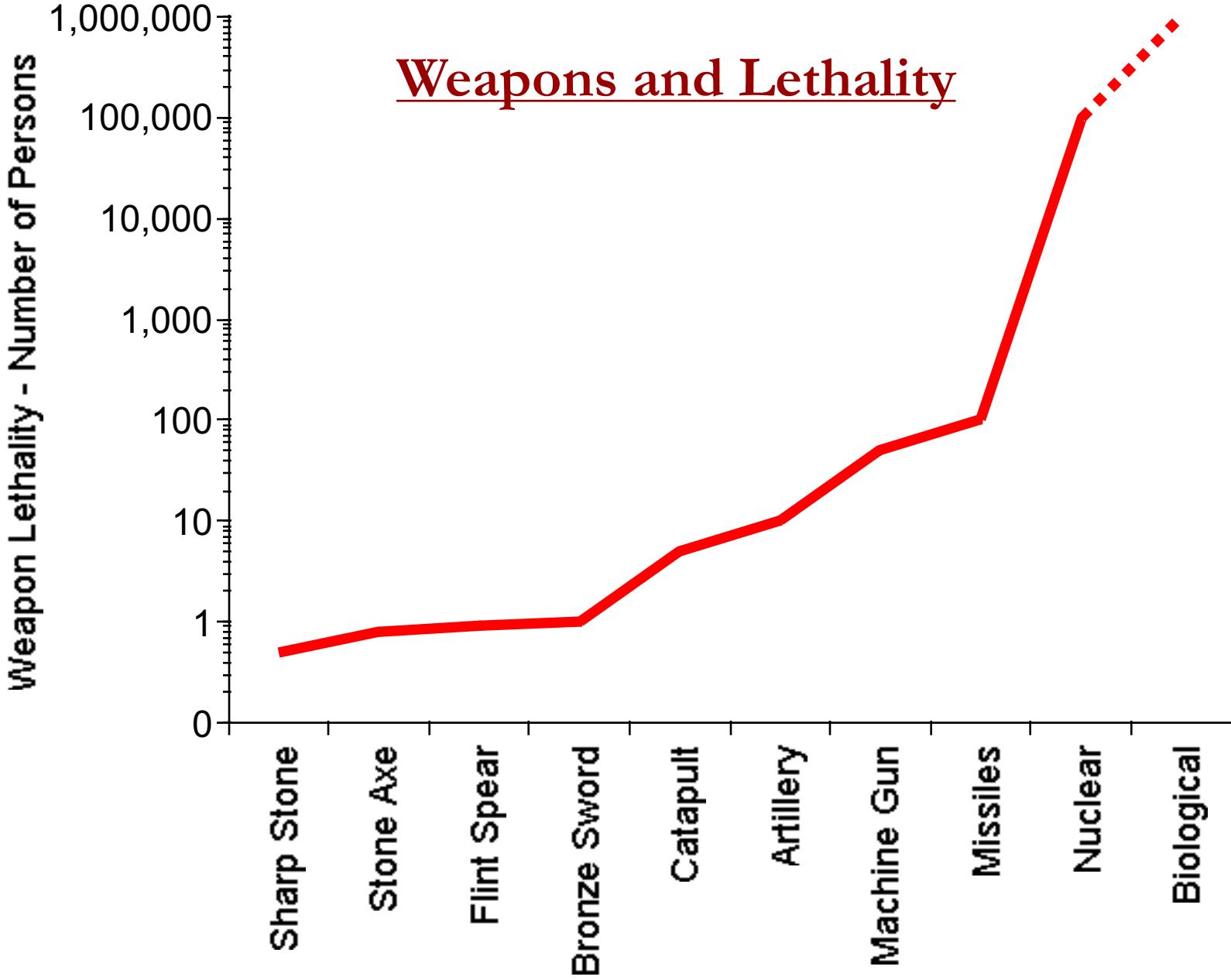
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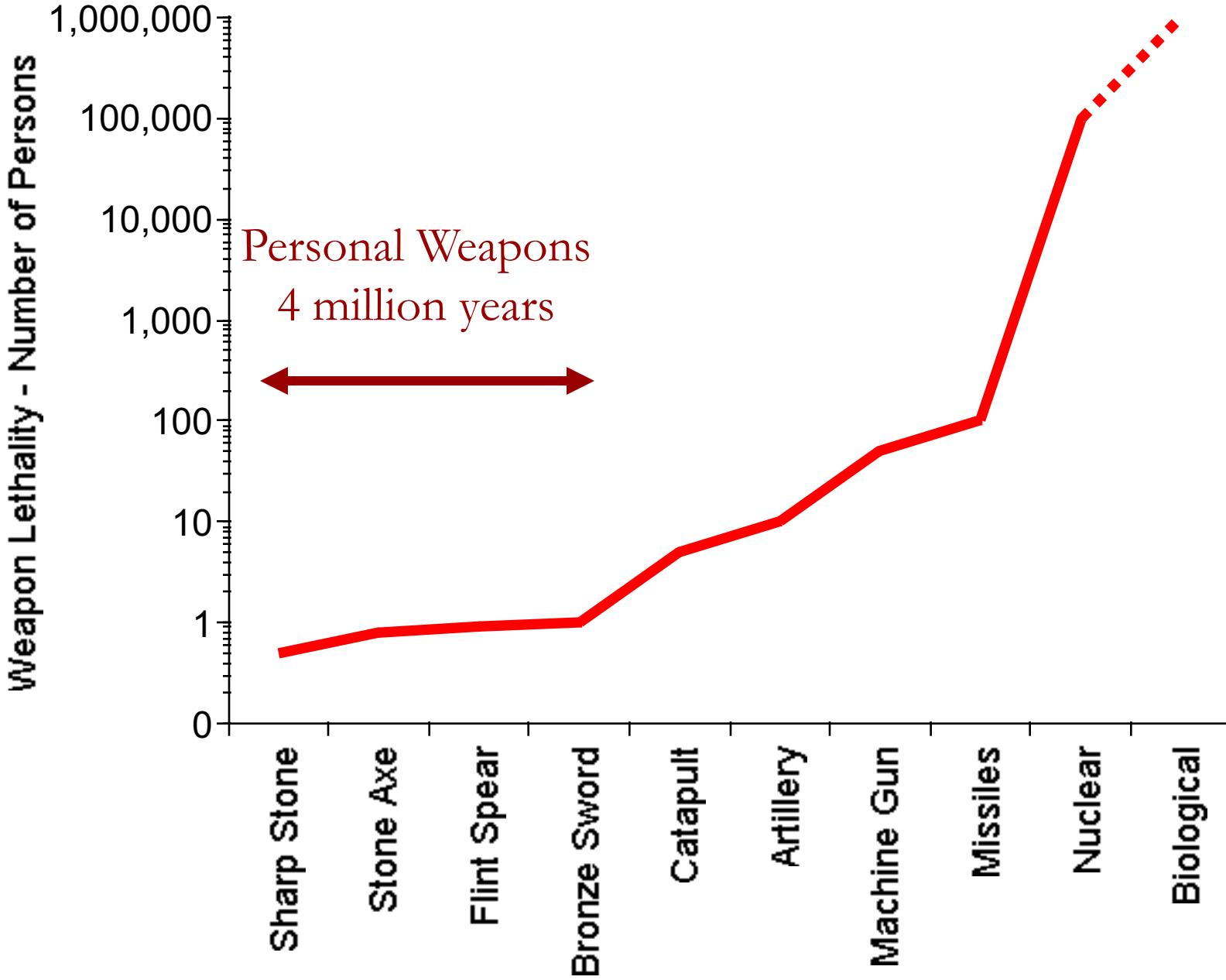
Roman Arrowhead
Gaul – cca. 200 A.D.

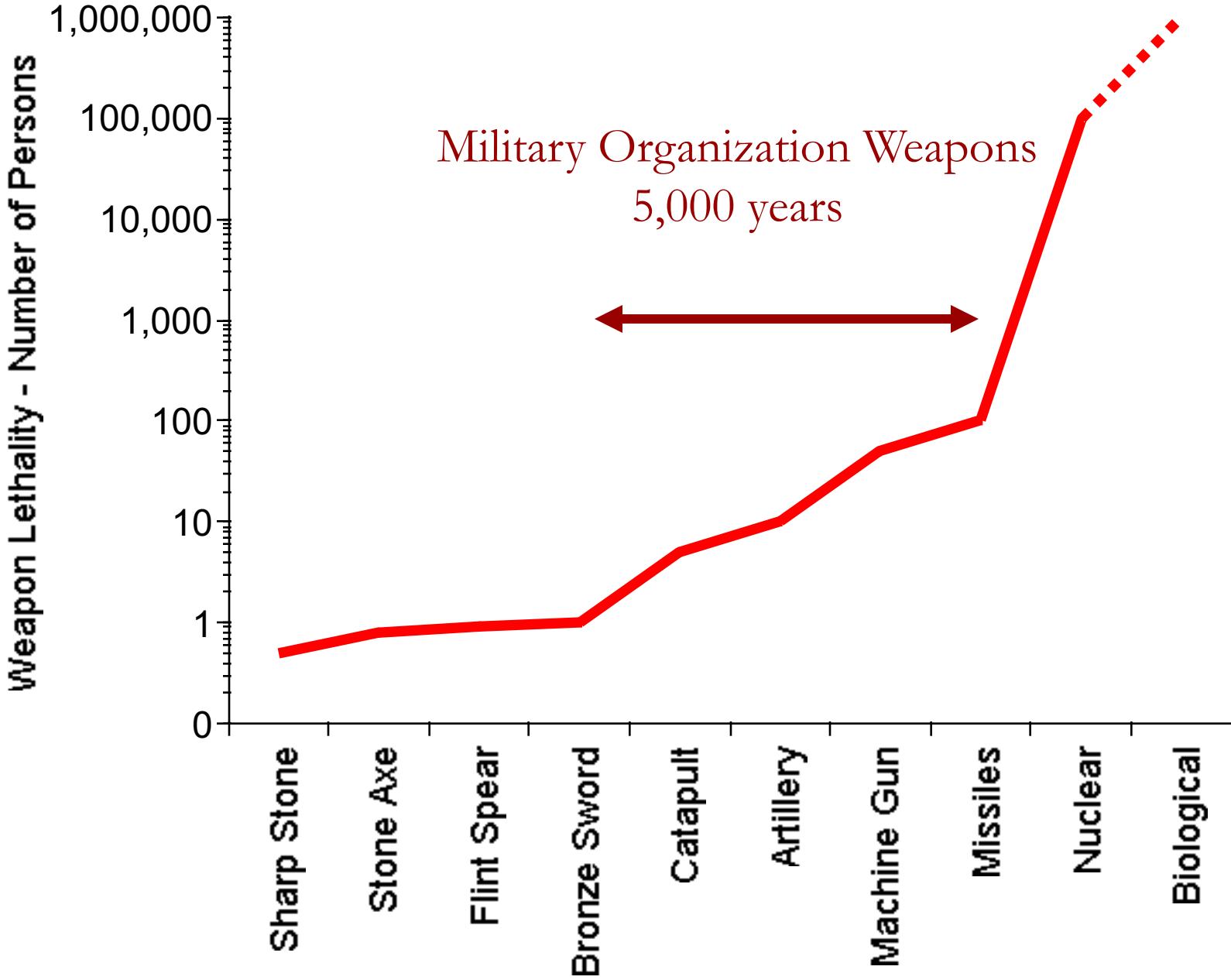


Top view
Roman Arrowhead

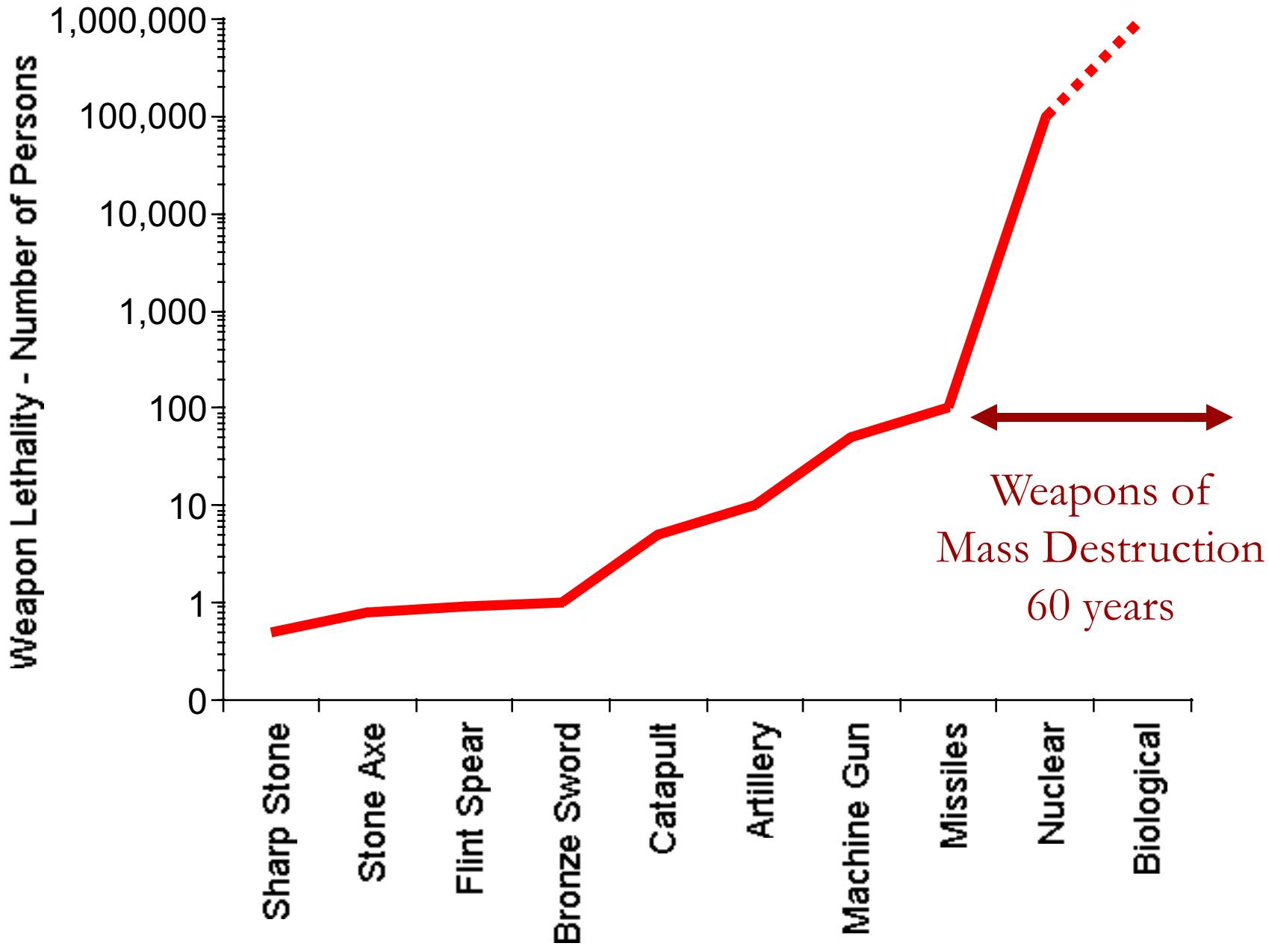


Weapons and Lethality





Military Organization Weapons
5,000 years



Lesson

- This is a reminder about the long and precarious path of evolution.
- This is to bring an awareness that the nature of war has now changed and the life in the USA will never be the same again.