

		Locality of occupation	Pottery/Grinding	Lithics	Economy
	Early Acacus (9,800-8,900 yrs)	* base camps with stone structures in Acacus mts * use of interdune lakes * small occupation sites	* NO pottery * very very rare grinding tools * beads: very rare	* microliths, backed pcs, high blade/flake ratio * mainly quartz	* specialised hunting of Barbary sheep * very little plant processing
	Late Acacus (8,900-7,400 yrs)	* concentrated in highland (Acacus) sites * rare use of interdunes * larger sites	* Pottery: Dotted wavy-line, rocker decoration * Grinding tools: very frequent * beads: frequent * decorated ostrich eggshell	* high macro/microlith ratio * decreased % of blades and bladelets * increased % of geometric microoliths * range of raw materials	* broader hunting range (small + large mammals, fish, birds) * significant exploitation of wild cereals * enclosures of Barbary sheep? * storage
	Early Pastoral (7,400-6,400 yrs)	* dense occupation of Acacus mts and Messak * dense occupation of interdunes	* Pottery: rocker decoration, but no wavy-line		* economy based on cattle, ovicaprids?, and exploitation of wild cereals
	Middle Pastoral (6,100-5,000 yrs)	* occupation of Acacus mts, with smaller sites * quarries on Messak * intense use of interdunes – semi-sedentary camps	* Pottery: 'alternatively pivoting stamp' decoration	* crude lithics * wide range of arrowheads * polished tools (but rare)	* ?Nile influence * economy based on cattle, kept in IDs, with seasonal use of highlands * increased population * cattle burials
	Late Pastoral (5,000-3,500 yrs)	* discontinuous use of shelters in Acacus * wadis of Messak * no occupation of IDs	* Pottery: undecorated	* crudish tools, almost all quartzite * increase use of exotic raw materials * pre-dynastic tools	* economy based on ovicaprids – almost NO cattle * high mobility * human burials

Adapted from di Lernia, Cremaschi and Garcea

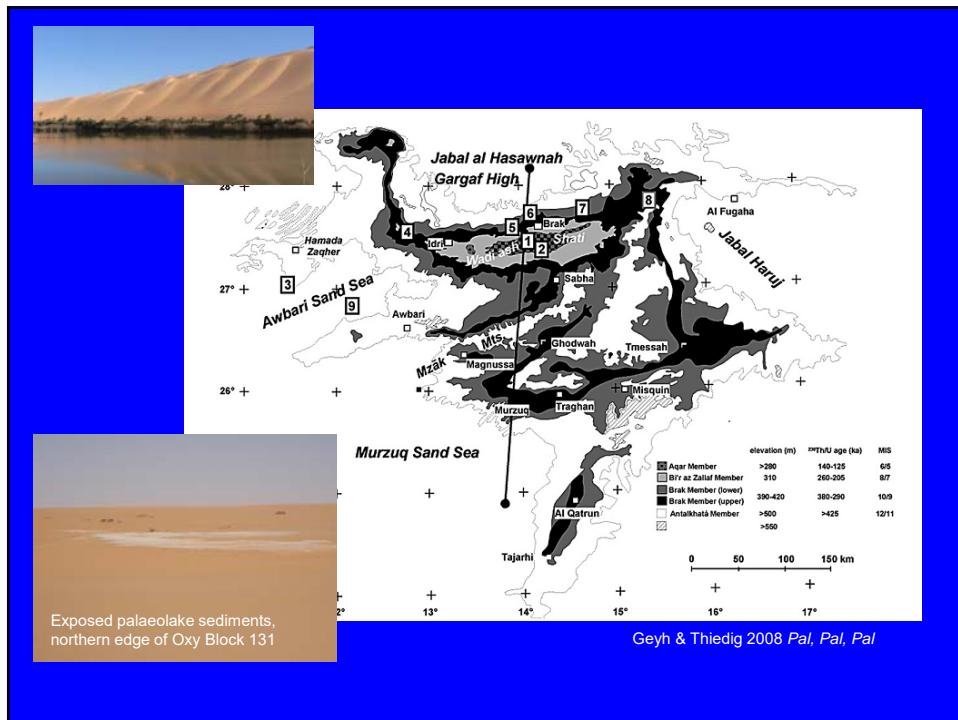


DMP: Desert Migrations Project

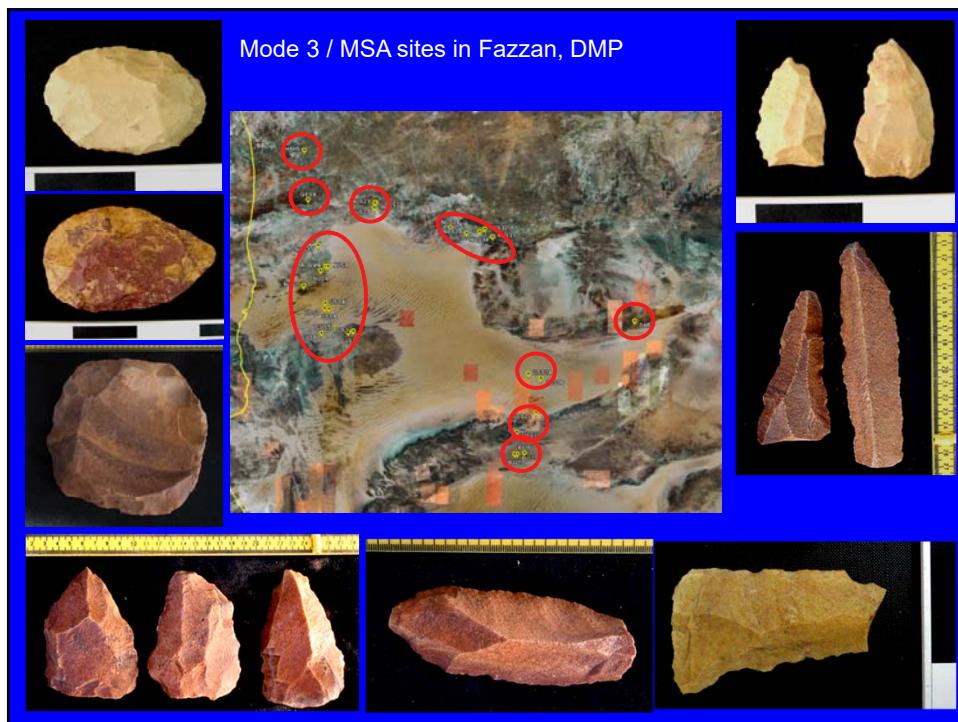
(1) David Mattingly and his team – Burials & Identity among the Garamantes

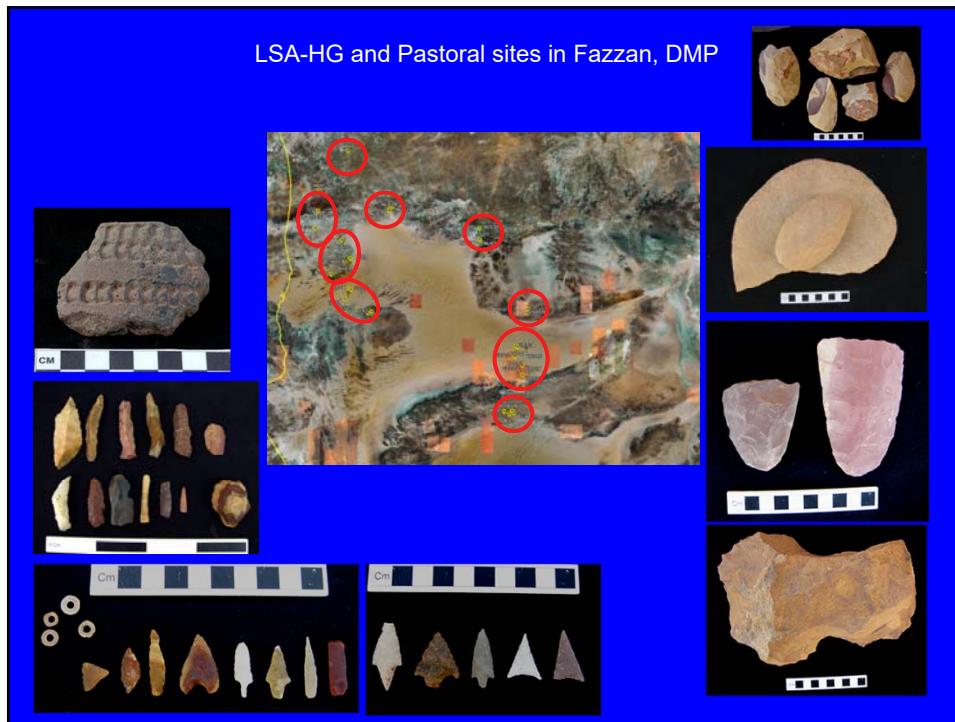
(2) Nick Drake, Kevin White and Simon Armitage – the palaeo-lakes of Fazzan

(3) Marta Mirazon Lahr, Rob Foley and team – the prehistory of Fazzan and the role of the Central Sahara in hominin dispersals out of Africa









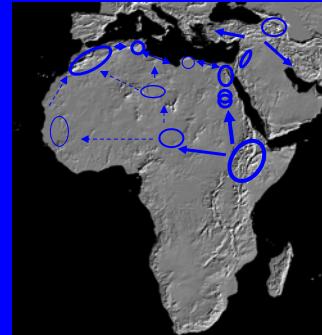
What we know and don't know...

Earliest occupations (1.8-0.8 Myr)

- (1) North Africa was first colonised in the Plio-Pleistocene, probably ~1.8 Myr by a population of *Homo ergaster/erectus*. This early occupation seems to have been sparse and ephemeral. These hominins most likely used the Central Saharan corridor, and the presence of Oldowan sites in Fazzan (DMP) supports this hypothesis.
- (2) North Africa was also colonised by hominins who manufactured early Acheulean artefacts at least by ~1 Myr, probably another populations of *Homo ergaster/erectus*. This dispersal also seems to have used the Central Saharan corridor, and again similar early Acheulean assemblages have been found in Fazzan (DMP).

Early Middle Pleistocene occupation (0.8-0.3 Myr)

- (1) The character of Acheulean industries in North Africa changes in the Middle Pleistocene. They become more widespread from West to East (including the Nile and western desert), and show strong affinities to derived Acheulean industries in East Africa (Olorgesailie) and the Middle East (GBY)
- (2) The makers of North African Middle Pleistocene Acheulean industries probably represent a population of *Homo heidelbergensis*, who colonises Europe at similar time.
- (3) This dispersal probably used the Nile corridor (re-established as a waterway linking the East African lakes and the Mediterranean at this time). Whether the Central African route was used or not remains unknown, but the great number of late Acheulean sites in Fazzan (DMP) and indeed elsewhere in the Central Sahara (Tihoidane), suggests that it was.



Late Middle Pleistocene occupation (0.3-0.13 Myr)

- (1) This is a critical time in African prehistory, encompassing the origins of *Homo sapiens* – yet, little is known about the pattern and process of human evolution at this time.
- (2) Even less is known in North Africa – except that the Mode 3/MSA record is extremely rich, widespread, and variable. In particular, the relationship between the late Acheulean and the early MSA is poorly understood.
- (3) Poor chronological control throughout the entire region – an ESR date of 190,000 for the fossil of Djebel Irhoud suggests a pre-modern Mode 3 population (*Homo helmei*?)



Early Upper Pleistocene occupation (0.13-0.06 Myr)

- (1) First colonisation of North Africa by *Homo sapiens*, probably part of a dispersal of modern humans from East Africa that reached the Levant ~120,000 years ago.
- (2) Not clear which route was used, probably the Nile corridor or Red Sea coast. Possible presence en Fazzan at this time – Al Grayfah (DMP).
- (3) The Aterian industry has its heartland in the Maghreb, where it is dated from 85,000 yrs ago and associated with modern human fossils (Dar es-Soltan). However, its distribution is more widespread, being present in Fazzan (DMP, Acacus), western Egypt, and claimed in Arabia.

Mid-late Upper Pleistocene occupation (60-10 Kyr)

- (1) During the last glacial period (MIS4 to MIS2), most of North Africa becomes depopulated.
- (2) Possible refugia: Cyrenaica ? (Dabban, etc.) and Maghreb (Iberomaurusian)
- (3) Origins of these late Pleistocene North African populations remain unknown – Mediterranean? But intermittent occupation of the Nile continues, and links between the Iberomaurusian and the Sahaba Sudanese fossils have been suggested.
- (4) The central Sahara remains uninhabited until the early Holocene, its re-colonisation lagging by a few thousand years the environmental ammelioration.
- (5) The re-colonisation of the Central Sahara was by sub-Saharan African hunter-gatherers, with strong cultural links to populations in East Africa, Chad and Sudan.
- (6) The origins of the first Central Saharan pastoral economies remain disputed.
- (7) Strong links with the Nile, rather than sub-Saharan Africa, become established from the mid-Holocene.
- (8) The Garamantes re-establish the Central Saharan corridor through trade.

