## Map 98 Merv-Bactra

Compiled by F. Hiebert, P.L. Kohl and St J. Simpson (west), 1995

### Introduction

Map 98 Merv-Bactra Map 99 Bactria

#### West

Map 98 largely covers the regions known to classical authors as Margiana, Ar(e)ia and the western part of Bactria. This area corresponds in modern political terms to north-east Iran, north-west Afghanistan, southern Turkmenistan and southern Uzbekistan. Ancient and modern settlement patterns have been strongly dictated by the physical geography. It consists of a high Iranian plateau which is ringed by mountain chains that continue into Afghanistan, and drained by numerous streams as well as three major rivers, the Arius (known as the Har-i Rud in Afghanistan, or Tedjen in Turkmenistan), Margus (Murghab), and Oxus (Amu Dar'ya). Each of these rivers flows northwards to form large delta-fans capable of supporting substantial populations.

Classical authors offer vague descriptions of this region, as well as references to major urban centers or rivers. Arab conquest accounts, Syriac church synod lists, coin legends and Sasanian *bullae* provide some additional toponymic information (Le Strange 1905; Fiey 1973; Gyselen 1989). Archaeological discoveries, however, remain the primary source for reconstructing ancient settlement patterns. Even so, systematic archaeological investigation has been largely confined to the Margus oasis area and to southern Uzbekistan (north of the R. Oxus). Other areas of southern Turkmenistan, north-east Iran and north-west Afghanistan have attracted less archaeological attention. This is reflected by the distribution of places marked on the map, and their limited number.

Within southern Turkmenistan most of the archaeological work has been conducted by Soviet teams belonging to Yu.T.A.K.E. (Southern Turkmenistan Complex Archaeological Expedition), founded in 1946. Over the past decade a number of foreign expeditions have been working in the country. As yet, most of this research is only published as preliminary reports, and problems remain in the exact dating of surveyed sites. Nevertheless the state of research for the early periods has been ably synthesized by Kohl (1984), and more general summaries covering the classical and later periods have been published by Frumkin (1970), Harmatta (1994), and Litvinsky (1996).

The Merv oasis has been extensively surveyed, first by an American team in 1904, and most recently by a joint Turkmen-Russian-Italian expedition (Gubaev 1998). A number of palaeochannels and sites dating from the third millennium B.C. to the Islamic period have been mapped, although the classical and later periods are treated summarily. Evidently there was a gradual westward shift of the hydrography, combined with retraction of the irrigated settled area into the core of the oasis during the classical period. These developments appear to have resulted from an interplay of neotectonics, climatic change and human activity.

The drainage pattern was irrevocably changed in the twentieth century with the construction of the Karakum canal, which draws water from the Oxus through the Margus and Arius deltas. In addition, modern agricultural policies have led to the destruction of many small sites. The map marks the most significant surviving archaeological sites, major palaeochannels reconstructed from satellite images and aerial photographs, and major ancient canals. It must be stressed that the exact dates and courses of many of these water channels are hypothetical. Moreover, as in other intensively settled and irrigated alluvial regions, the pattern of canals must have changed over time. The heart of the Merv oasis is known to have been intensively cultivated in antiquity (cf. Strabo 11.10. 2), and archaeobotanical, charcoal and zooarchaeological analyses confirm the existence of a thriving agricultural economy there, at least during the Sasanian period.

Antiochia is the principal site within Margiana. Little is known about its Hellenistic or Parthian periods. These are now buried deep below later Sasanian and Early Islamic occupation-levels that, judging by aerial photographs,

appear to have preserved a street-plan based on rectangular *insulae*. Excavations conducted since 1992 as part of the Turkmen-British Merv Project have added important new information on the Hellenistic, Parthian and Sasanian fortifications, as well as other areas of Sasanian housing (Herrmann 1999). With the destruction of many rural sites in the hinterland of Antiochia, those sites that do survive tend to be larger settlements or substantial fortresses; a selection is marked. Historical accounts suggest that the Margiana region was not confined to the delta of the Margus, but extended southwards along the river valley a short distance above the suggested location for Iasonion. There has again, however, been little archaeological survey work along the middle course of the R. Margus.

A number of the places marked in the Ar(e)ia region of Afghanistan reflect chance finds and unexcavated sites rather than systematic investigation. The region around Alexandria Ariorum—presumed to lie beneath or close to the present city of Herat—has likewise received little archaeological attention. The lower course of the R. Arius has not been properly surveyed either, although a number of Partho-Sasanian and later sites exist in the Serakhs area and along the piedmont zone to the north-west.

### Map 98 east, and Map 99

Eastwards, the classical world extended to central Asia (modern Turkmenistan, Uzbekistan and northern Afghanistan), where western colonists and artisans brought trade items and cultural features into an already well established local culture. In the oasis regions of northern and southern Bactria, late Iron Age and Achaemenid/early Parthian period settlement maintains the Bronze Age pattern of large-scale irrigation agriculture with sites interspersed along canals. In the foothill regions and along the banks of large rivers, land use changed from small-scale irrigation to more complex irrigation systems involving the use of *qanats* and water wheels, which allowed urban sites to develop here too.

The period from 330 to 150 B.C. sees post-Alexandrian Seleucid and Greco-Bactrian communities incorporated as satrapies. Subsequently, the period from 150 B.C. to A.D. 225 shows the further development of local settlements within the context of important Parthian, Roman and Kushan imperial policies. The establishment of many new settlements, particularly along the R. Oxus, reflects both a technological shift and the growth of foreign colonies, making the distinction of purely "classical" sites quite difficult. Maps 98 and 99 feature not only the larger sites known to Greek and Roman authors, but also the network of smaller oasis sites which made this area so important to the classical world. Following the establishment of Sasanian hegemony (A.D. 225-640), the region became a major breadbasket for the eastern empires, and was thus in turn an important target for early Islamic expansion.

The boundary of classical influence to the north and west is somewhat arbitrary, since the area is characterized by many contiguous local cultures within the larger context of imperial rule. Particularly intriguing is the establishment of a series of walls, traditionally dated to the Seleucid period (but inadequately investigated), that form several boundaries: between Bactria and Sogdiana; to the north and north-east of Bactria; in the Merv oasis; north of the Gurgan plain (Map 96); and further west, inland from the western shore of the Caspian Sea (Map 88).

Note that the famous Sar-i Sang lapis lazuli mines of Badakhshan fall immediately beyond the edge of Map 99 (east of E3).

South of the R. Oxus is the heartland of classical Bactria. Soviet-Afghan, French, Japanese, British and American archaeological teams have established broad parameters for settlements located here in deltaic oases and along river-beds, and for the coincidental modifications of the landscape. By far the most extensive survey work was conducted by Soviet-Afghan (Kruglikova 1976; 1986; Sarianidi 1989) and French teams (Bernard 1978; Gentelle 1989; Lyonnet 1997; Gardin 1998). Ball's encyclopedic compilation of archaeological sites in Afghanistan (1982) was assembled shortly before the Soviet invasion, and remains the standard reference for this archaeologically rich region. The present map reflects not only the standard syntheses (note Tarn 1951) of the classical historians, particularly Herodotus, Strabo, Arrian and Ptolemy (Holt 1988), but also the extensive modern surveys and excavations of sites of the period.

While the Oxus has often been cited as the northern boundary for classical Bactria, Piankov (1982) argues persuasively that ancient texts take the areas north of the river to be likewise part of the classical satrapy of Bactria. Intensive archaeological research conducted in Soviet Turkmenistan (Pilipko 1985), Uzbekistan (Rtveladze 1974; 1976) and Tajikistan (Stavisky 1986) has identified the settlement patterns north of the Oxus and its headstream from the east, the Pyandzh (Map 99 D2-E2). The establishment of cities such as Tarmita, Takht-i Sangin (the site of the

Oxus temple) and "Greek" cities along the banks of the Oxus, demonstrates a pattern similar to southern Bactria. Some areas may seem unoccupied (for example, along the north bank of the Oxus west of Tarmita) only because they have not yet been properly surveyed due to state security or political restrictions. Archaeological surveys suggest that the northern region was in fact as densely occupied as southern Bactria, with a strong shift in settlement location by the early Parthian period (c. 150 B.C.). During the Kushano-Sasanian periods, northern Bactria was clearly a melting-pot of cultures. Buddhism, Mithraism, Christianity and Zoroastrianism met here, and there were also links to China from the west.

## **Directory**

### **Names**

Grid	Name	Period	Modern Name / Location	Reference
C1	Alan tepe	CRL	TKM	Gubaev 1998.944
C1	Alexandria/	CHR/	Erk Kala / Gyaur Kala	RE Alexandreia 3; Bosworth 1995, 108;
	Antiochia/	HRL	TKM	Fraser 1996, 31 (n. 67), 116-18
	Merv			
C4	Alexandria Ariorum/	HRL	Herat AFG	IsidChar 15; Bosworth 1980, 356-57;
	Artacavan/			Ball 1982.428; Gyselen 1989;
	Harey			Fraser 1996, 164-66, 178
G1	Altin Dilyar tepe	CH?	AFG	Ball 1982.38
F2	Andkhui	L	AFG	Ball 1982.41
	Antiochia = Alexandria			
G1	Aq Chapar 1	HR	AFG	Ball 1982.43
F1	Aq tepe Burguchi	R	along R. Amu Dar'ya AFG / TKM	Pilipko 1985, 175 (no. 15)
G2	Aq tepe Nawarid	Н	AFG	Ball 1982.49
B4	Ar(e)ia	HRL	Satrapy / province of	RE; Foucher 1942, 396; André 1980, 107
	§ Arii	CHR	Herat AFG	
C4	Arius fl.	HR	Hari-Rūd AFG	RE; Bosworth 1995, 36
	Artacavan = Alexandria Ariorum			
H1	Baba tepe	HRL	UZB	Rtveladze 1974, 77 (B-30)
G2	Bactra/	CHR/	Balkh AFG	Tarn 1951, 114; André 1980, 64, 124;
	Zariaspa	HR		Bosworth 1980, 356
	§ Zaraspadum	R		
G2	Bactria			See Map 99
G2	Bactrus?/		AFG	See Map 6
	Zariaspis? fl.			
C1	Bayram Ali	L	TKM	Grenet 1984
F1	Bekovskaya krepost'	RL	along R. Amu Dar'ya	Pilipko 1985, 174 (no. 11)
			TKM	
F1	Branchidai	Н		Strabo 11.11.4; Curtius 7.5.28
G1	Challa tepe	HR	UZB	Rtveladze 1974, 76 (B-16)
C1	Changly	L	TKM	Koshelenko 1991
C1	Chilburj	L	TKM	Gaibov 1990
G1	Choponata	HR	UZB	Rtveladze 1974, 76 (B-17)
G1	Dabil kurgan	CHRL	UZB	Rtveladze 1974, 76-77 (B-25)
F2	Dargamanes? fl.		AFG	See Map 6
F1	Deshikli tepe	RL	along R. Amu Dar'ya TKM	Pilipko 1985, 176 (no. 21)
G1	Dilbarjin	HRL	AFG	Ball 1982.295
B1	Djin tepe	R	TKM	Koshelenko 1963; Gubaev 1998.305
C1	Durnali	RL	TKM	Bader 1994
F2	Emshi tepe	HRL	AFG	Ball 1982.314

Grid	Name	Period	Modern Name / Location	Reference
G2	Faizabad tepe	Н	Isma'il Qara tepe AFG	Ball 1982.316
E3	Gharluli	RL	AFG	Ball 1982.355
F3	Ghulbiyan	L	AFG	Ball 1982.362
B1	Göbekli tepe	RL	TKM	Gubaev 1990
	Harey = Alexandria Ariorum			
C1	Haroba koshuk	L	TKM	Pugachenkova 1958
C3	Iasonion	RL	Yarim tepe? TKM	Ptol. 6.10.3; AmmMarc 23.6.54; Fontaine 1977, 101
G1	Jiga tepe	HRL	AFG	Ball 1982.475
A2	Kashafl		IRN	M. Roaf
G1	Kasp? fl. <i>Kampyr tepe</i>	HR?	UZB	Rtveladze 1974,74 (B-11)
Ei	Kasp? fl. = $Kashaf R$ .		A11 ' 1 1 D A	
F1	Kerkichi	Н	Akhsisak, along R. Amu Dar'ya TKM	Pilipko 1985, 173-74 (no. 10)
G2	Khalabad tepe	Н	Halobad tepe / Churuk tepe AFG	Ball 1982.550
G1	Khodzha-kamar	ACH	UZB	Rtveladze 1974, 79 (B-49)
C1	Khurmuzfarrah	L	Uly Kishman TKM	Bader 1993, 58-63
G1	Kulug-shakh tepe	HR	UZB	Rtveladze 1974, 76 (B-15)
F1	Kum tepe	RL	along R. Amu Dar'ya TKM	Pilipko 1985, 129 (no. 28)
G1	Kumsar	R	AFG	Ball 1982.642
C1	Kushmeikhan	L H?R?L?	Köne Kishman TKM	Bader 1992
C1	Kyrk tepe	Π/K/L/	TKM	Durdyev 1959
G1	Maidan kurgan	HR	UZB	Rtveladze 1974, 77 (B-27)
C1	Margiana/	HRL	TKM	RE; Tarn 1951, 88-89 (n. 3);
	Margush/			André 1980, 60; Hermann 1999
	Merv			
C1	§ Margianoi	Н	TKM	DE Margiona, André 1000 60
CI	Margus fl. Margush = Margiana Merv = Alexandria Merv = Margiana		I K.W	RE Margiana; André 1980, 60
F1	Mirzabek kala	HRL	along R. Amu Dar'ya TKM	Pilipko 1985, 177-78 (no. 25)
G1	Munchak tepe	R	along R. Kugantag Dar'ya TKM	Pilipko 1985, 180 (no. 32)
B1	Munon tepe	L	TKM	Nikitin 1986
G2	Nadir tepe	RL	AFG	Ball 1982.753
G2	Nimlik	Н	Mamalik AFG	Ball 1982.776
E2	Ochos? fl.	HRL	Sangalak AFG	Bosworth 1995, 108-10
F1	Omar kala	RL	along R. Amu Dar'ya	Pilipko 1985, 173 (no. 8)
F1	Oxus fl.		TKM	See Map 6
B4	Palgird tepe	RL	AFG	Ball 1982.794
G2	Parishan tepe	HR	AFG	Ball 1982.800
C4	Pir-i Surkh	RL	AFG	Ball 1982.813
D4	Qadis	L	AFG	Ball 1982.826

Grid	Name	Period	<b>Modern Name / Location</b>	Reference
F1	Russkaya krepost'	L	along R. Amu Dar'ya TKM	Pilipko 1985, 174 (no. 12)
D4	Sabarz,	R	AFG	Ball 1982.961
G2	Salar tepe	Н	AFG	Ball 1982.975
A3	Saripha M.	R	Barkhat Dagh	Ptol. 6.10.1, 6.17.2; Fontaine 1977, 101
F2	Sar-i Pul	R	AFG	Ball 1982.1000
A1	Sarnios fl.		TKM	See Map 3
B2	Serakhs	L	TKM	B. Kaim
F1	Shor tepe	R	Mukry, along R. Amu Dar'ya TKM	Pilipko 1985, 178 (no. 26)
H1	Shurob kurgan	HR	UZB	Rtveladze 1974, 74 (B-10)
G1	Talashkan tepe	CHR	UZB	Rtveladze 1974, 74 (B-12)
F2	Tilla tepe	RL	AFG	Ball 1982.1192
G1	Tillya tepe	R	along Kugantag Dar'ya TKM	Pilipko 1985, 180 (no. 33); Sarianidi 1989
B1	Yaz tepe	AC	TKM	Masson 1959
	Zariaspa = Bactra Zariaspis? fl. = Bactrus? fl.			See Map 6
F3	Zarshoy	RL	AFG	Ball 1982.1258
	•			

# Pass

Grid	Location	Period	Reference
G1	N Maidan kurgan ("Iron Gate") UZB	H	Pugachenkova 1990, 52

# Walls

Grid	Location	Period	Reference
B1	around Munon tepe and Kushmeikhan, "Antiochus wall" TKM	C?HRL?	Bader 1995
C1	around Merv, "Gilyakin-Chilburj wall" TKM	C?H?L?	Bader 1995
G1	Kam Pirak wall, near Kumsar AFG	H?RL	Ball 1982.520
G1	N Maidan kurgan UZB	R?	Pugachenkova 1990, 52
G1	S Maidan kurgan UZB	R?	Pugachenkova 1990, 52

# **Unlocated Toponyms**

Name	Period	Probable Location	Reference
Nicaea/ Nigaea	L		AmmMarc 23.6.54
Sina/ Sena	H?R	TKM	Ptol. 6.10.3
Zotal L.	H?R	TKM	Pliny, NH 6.46-47; Bader 1996, 56-57

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