

MASCA- Stuart Fleming Records

0075

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University of Pennsylvania, Penn Museum Archives

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Summary Information

Repository	University of Pennsylvania: Penn Museum Archives
Creator	Fleming, Stuart J., b. 1943
Creator	MASCA.
Title	MASCA- Stuart Fleming Records
Call number	0075
Date [inclusive]	1975-2009
Extent	20 linear foot
Language	English
Abstract	<p>MASCA, or the Museum Applied Science Center for Archaeology, was established in 1961 by a grant from the National Science Foundation. MASCA was modeled after the Research Laboratory for Archaeology and the History of Art in Oxford. From the time of its inception in 1961, MASCA, along with the Radiocarbon Laboratory, made a number of contributions to radiocarbon dating and other dating and materials analysis techniques including thermoluminescence, xeroradiography, Proton Induced X-ray Emission (PIXE) analysis of metals, analysis of faunal and plant remains and other projects either within the museum or remotely at archaeological sites. MASCA was disassembled in 2009.</p>

Biography/History

MASCA, or the Museum Applied Science Center for Archaeology, was established in 1961 by a grant from the National Science Foundation. MASCA was modeled after the Research Laboratory for Archaeology and the History of Art in Oxford. From the time of its inception in 1961, MASCA, along with the Radiocarbon Laboratory, made a number of contributions to radiocarbon dating, including, but not limited to, breakthroughs in recalibration and dendrochronology. MASCA performed a number of other dating and materials analysis techniques including thermoluminescence, xeroradiography, Proton Induced X-ray Emission (PIXE) analysis of metals, analysis of faunal and plant remains and other projects either within the museum or remotely at archaeological sites. Additionally, a number of expeditions were sponsored by MASCA globally using scientific techniques to advance archaeological findings, including magnetometry reconnaissance and instrument surveys. Under the MASCA Research Papers, the MASCA Journal, and a number of bound volumes were produced MASCA. MASCA was disassembled in 2009.

Scope and Contents

Scope and Content Note

The MASCA – Stuart Fleming Records consist of the records pertaining to the activities of MASCA while under the direction of Stuart Fleming starting in 1978. A number of textual records, correspondence and data sheets are included as well as a number of photographs and other graphic materials such as x-rays and xeroradiographs. Future accessions are expected. The collection contains the following series 1) Exhibits/Outreach 2) Thermoluminescence 3) Metallurgy 4) Xeroradiography 5) Faunal Remains 6) Paleoethnobotany 7) Materials Analysis 8) Other Projects 9) Publications 10) Administration.

Exhibits/Outreach

This series pertains to the outreach portion of MASCA and its research projects, including photos and textual records documenting its involvement in the creation of museum exhibition materials and websites, as well as field related symposiums and conferences.

Thermoluminescence

The records in this series consist of data, photos and textual records pertaining to the thermoluminescence lab at MASCA, included materials pertaining to the Hasanlu and Dinkha sites, as well as other smaller projects both in conjunction with the Penn Museum and other institutions such as the British Museum.

Metallurgy

This series contains data, correspondence, photos and other textual records pertaining the materials analysis (mostly PIXE spectrometry) of metal objects both for museum sponsored expeditions at sites such as Nippur and Tepe Hissar as well as contracted or collaborative analysis with other institutions, such as the British Museum and Colonial Williamsburg.

Xeroradiography

This series contains original xeroradiographic images as well as the textual records pertaining to the xeroradiographic lab at MASCA and its projects.

Faunal Remains

This series contains data and textual records as well as photos and x-rays pertaining to the studies of faunal remains conducted by MASCA. Bone projects under the direction of Kathleen Ryan can be found in the MASCA - Kathleen Ryan Papers.

Paleoethnobotany

This series contains records pertaining to the study of plant materials conducted by MASCA.

Materials Analysis

This series contains records pertaining to materials analysis techniques conducted by MASCA that do not fall into the other major series of this collection.

Other Projects

This series contains data, correspondence, photos and other textual records pertaining to short term or minor projects conducted by MASCA, including information about field equipment used, overviews of research projects and field trips, as well as information pertaining to museum sites such as Tepe Gawra, Tell Safut, Gidion, Phrygian, Tell es-Sweyhat and Hajji Firuz, as well as projects contracted or in collaboration with outside organizations.

Publications

This series contains correspondence, manuscripts, photos, administrative and other textual records pertaining to the publication activities of MASCA, including the MASCA Journal, MASCA Research Papers, and several bound volumes published by the Penn Museum Press.

Administration

This series contains textual records pertaining to the administration of MASCA, including information pertaining to staff, volunteers and interns, as well as memos about the larger activities/function of MASCA, grant information and applications, and the purchasing and use of field equipment.

Administrative Information

University of Pennsylvania, Penn Museum Archives

Controlled Access Headings

CORPORATE NAME(S)

- British Museum.
- MASCA research papers in science and archaeology .
- MASCA.

FUNCTION(S)

- Museum outreach programs

FORM/GENRE(S)

- Faculty papers

GEOGRAPHIC NAME(S)

- Egypt
- Gordion (Extinct city)
- Tepe Hisar (Iran)

PERSONAL NAME(S)

- Fleming, Stuart J., b. 1943
- Michael, Henry N. , PhD, 1913-2006
- Miller, Naomi Frances
- Pigott, Vincent C.
- Ralph, Elizabeth K., 1911-2000
- Ryan, Kathleen

SUBJECT(S)

- Hasanlu excavation reports
- Physical anthropology
- Tang horses
- University of Pennsylvania MASCA

Collection Inventory

METALLURGY, 1976-2006.

	Box
[Metallurgy Bibliog.].	1
[El Qitar 1984-87].	1
Surkh-Dum [1989].	1
Harappa [1998-1999].	1
Bani-Surmah.	1
Luristan/General [Data, 1990].	1
Egyptian Gold.	1
	Box
Gold Studies.	1
PIXE Graphics.	1
Sharafabad [1984].	1
PIXE (Charles Swann) [1980-92], 1980-1992.	1
	Box
[PIXE 1].	1
North American Cu.	1

RAST/PIXE.	1
[PIXE 2].	1
Boron Reactions.	1
Kommos Cu.	1
D/A Cu.	1
[PIXE 3].	1
Thai 7/89.	1
Hancock.	1
Slowpoke v McKerrell [1993].	1
Tell Abu Duwar [1989-91].	1
Hissar Ag [1988-89].	1
Saudi Coins [1985].	1
SMP: Nippur [1983-85], 1983-1985.	1
	Box
[Mesopotamia Metals Project 1].	1
Sumer Presentation.	1
[Mesopotamia Metals Project 2].	1
[Mesopotamia Metals Project CVs].	1
Notis (Lehigh) [1980-86].	1

Standards [1986].	1
Merkel Empir. Expt. [1986].	1
Williamsburg [1986-89].	1
Governor's Land and Williamsburg Exper.	1
Governor's Land SLAG (Bachman) [1982-83].	1
Bradford Benin [1992-1997], 1992-1997.	1
	Box
[Data].	1
[Objects].	1
[Photos].	1
[Data/Photos].	1
Exhibit Catalog: Daily Life: Night Time 1: Beth Shan.	1
Bradford/Cameo [1992].	1
Egyptian Bronzes [1980].	2
Vigso A/Maniles [1978-79].	2
Troad Gold [1976-79].	2
Rom/Tang [1991].	2
Siraf '91.	2
Chicago Surkh Dum [1991].	2

Archeometallurgy [1992-94], 1992-1994.	2
	Box
[Archeometallurgy 1].	2
[Archeometallurgy 2].	2
Archaeometall.: S/F.	2
Gawra V [1987].	2
Gawra VI [1987].	2
Gawra VII [1987, 2005].	2
Gawra VIII [1987].	2
Gawra IX [1987].	2
Gawra XII [1987].	2
Kish EDIII/AKK [1987].	2
Kish EDI [1987].	2
Hissar I [2006].	2
Khafajeh.	2
Fara [2004].	2
Ur.	2
Bernard Fishman: Pb-iso. [1981], 1981.	2
	Box
Pb-isotopes: Egypt, Baal.	2

Freer X-Ray of E 14295.	2
[Mesopotamian Metals Project Publication 1987].	2
[Invoices for Analysis].	2
[Hasanlu Metal Objects Images].	2
Metal Objects [Hasanlu, 2006].	2
[Hasanlu Metal Objects Scattergrams].	2

XERORADIOGRAPHY, 1985-1988.

	Box
Xerorad Poster [1987].	2
Tang Dynasty Horse Study [1987].	2
CVA Kylikes Pilot Study [1988].	2
Etruscan/S Italian Xero's [1985].	2
Tell es-Saidiyeh Background and Sampling [1987].	2
[Ban Chiang].	2
Ban Chiang Expanded: Run 03-05-86.	2
Tess [1].	2
Tess [2].	2

MATERIALS ANALYSIS, 1983-1994.

	Box
Tepe Seavan (Sherds for Neutron Activation Analysis) [1988].	2
Goey Tepe (material samples in folder) [1993-1994].	2
INAA (Instrumental Neutron Activation Analysis) Rare Earths [1989].	2
[INAA Tepe Gawra 1992].	2
[Lejjun Archeoceramic Analysis 1983].	2

PUBLICATIONS, 1970-2003.

	Box
Reviews [Craft Specialization 1993].	3
Childe Symposium [Craft Specialization 1993-94].	3
Addresses [Craft Specialization 1993-96].	3
[Childe Symposium Volume, Craft Specialization 1992-94].	3
Chap 20 Tringham [Craft Specialization 1993].	3
Chap. 13 [Craft Specialization 1996].	3
Vince Graphics/White.	3
Craft Specialization U. Museum Press 1994.	3

Accounts [1990].	3
Journals MRPS [1990].	3
Publications Committee [1989-95].	3
MASCA Journal Advisory Committee [1987-89].	3
Woman's Committee [1987-89].	3
Job [Job Description for Kathleen Ryan] [1988-90].	3
Aspects of Archaeometry.	3
[Sales/Budget/Minutes 1999-2000].	3
Perfume.	3
Perfume [2002].	3
[Print-a-Scent 2002].	3
Subscription Service Receipts 1984, 1985.	3
Mailing Lists [1979-83].	3
MASCA Journal [1982].	3
Greene M.S. [1996].	3
Lomello [1982-83].	3
Getty Foundation [Publications Grant 1989].	3
Golden [1997].	3
Museum Newsletter - Mummies Fullsize.	3

Bucaille [Mummies 1979-80].	3
Publication & Research Minutes [1981].	3
Shimada Ch. 2 [Photos].	3
[Correspondance 1972-86 with gaps].	3
Publicity [1975-91 with gaps].	3
SAR A Sillen Papers [1987].	3
Economy and Settlement in Near East eds. N.F. Miller and S.J. Fleming [1990].	3
SAA 1990 Abandonment.	3
MRPS - Glanzman [1996].	3
DNA Volume.	3
Medical Plants Volume [1996-97].	3
Ceramic Ecology [1997].	3
Karen V [1997].	3
Pigs Vol. Mail [1997-99].	3
Walda Forms etc. [2000].	3
Pigs Ch. 4 [1999].	3
Pigs Ch. 8 [Photos].	3
Reviews [Pig Vol. 1998].	3
Nelson Preface/Intrp [Pig Vol.].	3

Zettler Mail/Reviews [ca. 1997].	3
[Promotional Sheets].	3
[MRP Notes 88-90].	3
E. Shanklin [1993].	3
Reviews Kusimba ms. [1997].	3
[Kusimba Correspondance 2000-2002].	3
[Kusimba Correspondance 2 2000-2003].	3
McGovern Faunal [1983-85].	3
Mildenberg Disclaimer [1983-86].	3
Letters to Publishers Re Advertising [1979].	3
Reviews 1970-1971.	3
Exchanges [1980-1983].	3
Articles - Correspondance [1978-84].	3
Correspondance General [1979-1985].	4
Requests to Republish MASCA Correction Curves [1973-77].	4
Index - Instructions.	4
Godin.	4
[Grandin 1982].	4
[Misc. Correspondance 1999-2001].	4

[Correspondance/Distribution 1999-2000].	4
Animal Use [1990-91].	4
	Box
Richard Redding - for Animal Use.	4
Animal Use & Culture Change.	4
Crabtree.	4
MASCA Res Papers 1990 Animal Use and Cultural Change.	4
Elizabeth Reitz for Animal Use [1991].	4
	Box
SF Layout.	4
	Box
Mesometals pm.t. 150.	4
Mesometals Pagemaker 67%.	4
Mesometals Pagemaker 50%.	4
Masca Journal - Styles Information.	4
pm.t. 150.6 Mesometals.	4
Mesopotamian Metals Scanning (Originals).	4
SFs Picks.	4
Bg 1&2.	4
Pm Tests - Mesometals.	4

Kish: Chisels.	4
Kish: Togglepins.	4
Jp. admin. ms. etc.	4
SF Test Chariot Burial #2.	4
SF Originals.	4
Armitage "Animal Use + Culture Change [1991].	4
Finbar McCormick for Animal Use [1991-92].	4
Karega-Munene for Animal Use [1991].	4
Chris Szuter for Animal Use [1991].	4
Costantini P/M.	4
Costantini [1991].	4
[Otte Manuscript 1991].	4
Rothman.	4
MASCA Research Papers [Huss-Ashmore Vol. 1988].	4
MASCA Research Papers Future.	4
Cattle in Ancient N. Africa.	4
[Ethnobiology Review 2001-02].	4
Wine.	4
MASCA Research Papers Gift Fund [1989-91].	4

THERMOLUMINESCENCE, 1968-1993.

	Box
Th Book Reprints [1968-76 with gaps].	4
TL [1974-76].	4
[British Museum 1976].	4
1959.	4
1960.	4
[Thermoluminescence 1974].	4
Gawra Plum Wares [1988].	4
al-Basra/N.L. Benro [1984-85].	4
Tuan Fang [1972-73].	4
Chinese Bronzes [1974].	4
Chinese Bronzes [1974], 1974.	4
	Box
Bronze Core, Major Comput.	4
Maurer.	4
PT 395 A-G.	4
TL electrronics, Oxford.	4
[TL Object Photos].	4

[Hasanlu Objects (1 of 22)].	4
[Hasanlu Objects (2 of 22)].	4
[Hasanlu Objects (3 of 22)].	4
[Hasanlu Objects (4 of 22)].	4
[Hasanlu Objects (5 of 22)].	4
[Hasanlu Objects (6 of 22)].	4
[Hasanlu Objects (7 of 22)].	4
[Hasanlu Objects (8 of 22)].	4
[Hasanlu Objects (9 of 22)].	4
[Hasanlu Objects (10 of 22)].	4
[Hasanlu Objects (11 of 22)].	4
[Hasanlu Objects (12 of 22)].	4
[Hasanlu Objects (13 of 22)].	4
[Hasanlu Objects (14 of 22)].	4
[Hasanlu Objects (15 of 22)].	4
[Hasanlu Objects (16 of 22)].	4
[Hasanlu Objects (17 of 22)].	4
[Hasanlu Objects (18 of 22)].	4
[Hasanlu Objects (19 of 22)].	4

[Hasanlu Objects (20 of 22)].		4
[Hasanlu Objects (21 of 22)].		4
[Hasanlu Objects (22 of 22)].	4	4
[Dinkha Objects (1 of 7)].		4
[Dinkha Objects (2 of 7)].		4
[Dinkha Objects (3 of 7)].		4
[Dinkha Objects (4 of 7)].		4
[Dinkha Objects (5 of 7)].		4
[Dinkha Objects (6 of 7)].		4
[Dinkha Objects (7 of 7)].		4
[Hasanlu/Dinkha Object List].		4
[Hasanlu/Dinkha Scattergrams].		4
Has/Din Sherds.		4
Nippur '93.		4
		Box
Gawra.		4
Nippur Lists.		4
Nippur Raw Data.		4
Qiri [1993].		4

EXHIBITS/OUTREACH, 1977-2006.

	Box
[Ancient Metals Lectures].	5
[Aecheometry Symposium 77].	5
[Representing Animals Conf. 1997-99].	5
Garden Archaeology (N.F. Miller) [1988].	5
SAA - Glumac 1990.	5
NE Faunal Conference 1989.	5
[Mummy Exhibition ca. 1980].	5
	Box
[Text ca. 1980].	5
Exhibition Colour & X-Ray Negatives [ca.1980].	5
Egyptian Mummies B&W Negatives [ca. 1980].	5
Exhibition Colour & X-Ray Negatives 2 ca. 1980].	5
Mummy Modules [ca. 1980].	5
	Box
Egyptian Pamphlet [ca. 1980].	5
Budget [ca. 1980].	5
[Modules ca. 1980].	5
[Negatives ca. 1980].	5

UCP [ca. 1980].	5
[Photos ca. 1980].	5
Mummies: VII Embalmer's Craft [ca. 1980].	5
[Mummy Photos].	5
[Misc. Object Info, Egypt].	5
Exhibition Photograph Surplus.	5
[Etruscan Use of Amber].	5
[Etruscan Gold 1981].	5
Etruscan Necklace.	5
Turin Shroud.	5
[Interactive 1995].	5
[Site Modules/Bibliog.].	5
The Roman Day [Website ca. 2002].	5
MMP Website [2006].	5
SM Website [2005].	5
	Box
[SM Website (1 of 3)].	5
[SM Website (2 of 3)].	5
Boscoreale.	5

[SM Website (3 of 3)].	5
LS Colorless.	5
[Websites].	5
	Box
[Coins].	5
Mold Blown Jug.	5
Wine Flask.	5
SM Funerary Fun.	5
Early Byz. Perfumery.	5
SM Mold Blown Grape Flask.	5
RG Website Site Maps.	5
Roman Day.	5
Roman Glass Website - Weathering of Glass.	5
	Box
Roman Glass.	5
Roman Herbalism [Website].	5
Beth Shean Tomb Information for RG Website [2004].	6
Roman Glass Website Information.	6
MASCA Website.	6
MMP Website [ca. 2006].	6

MMP Website cont'd [ca. 2006].	6
[Website Metals].	6
Trajan's Market [Website].	6
Roman Wine [Website].	6
Fine Glassware [Website].	6

ADMINISTRATION, 1988-2009.

	Box
[Touchscreen Kiosk 1995].	6
Addresses Phone Nos.	6
[Museum Improvement Committee 1998].	6
Curriculum Vitae (Current).	6
Curriculum Vitae (Old).	6
Workstudy [2001-03].	6
MASCA Volunteers [1998].	6
Interns.	6
Info Center.	6
[Hourly Photographic Archive].	6

NEH - Resumes.	6
Zoarch Intern.	6
[Foresight Surveying 1998].	6
[MASCA Admin Memos 2009].	6
[MASCA Activities 1988].	6
[Misc. Grants 2005].	6
[NSF Archaeometry GPS].	6

FAUNAL REMAINS, 1981-1990.

	Box
Hajji Firuz [1981-83].	6
[Cheltenham Faunal Analysis].	6
Krogman's Statistics Measurements [Tepe Hissar].	6
[Tepe Hissar ca. 1990].	6
[Tepe Hissar 2 ca. 1990].	6
Computer Data Tepe Hissar.	6
Hissar Bones.	6
[Bones Photos/X-Rays].	6

Population Studies [1981-82].

6

Box

Trauma.

6

[Population Studies 1].

6

[Population Studies 2].

6

PALEOETHNOBOTANY, 1980.

Box

Hajji Firuz - Seed Samples [1980].

6

OTHER PROJECTS, 1980-2006.

Box

[Tepe Gawra 1991].

7

[Petra 1994-97, 2002].

7

EDM/Petra [1993-94].

7

EDM Projects [1991-93].

7

Box

[Admin].

7

NKH Survey.	7
[Non Mak La].	7
Kohl/Georgia.	7
PIXE AC.	7
EDM/Egypt [1992-96].	7
	Box
Sharer/Copan.	7
O'Connor/Abydos.	7
[EDM/Egypt].	7
Highland Foundry [1982].	7
Ford-Faesch [1989-91].	7
[Tell Safut 1988-89].	7
	Box
Tell Safut Analytical Project Summer 88-89: Misc.	7
Tell Safut: Background [1989].	7
Tell Safut: Manuscripts [1989].	7
[Gordion/Phrygian 1 ca. 1980].	7
[Gordion/Phrygian 2 ca. 1980].	7
[Gordion 1 ca. 1980].	7
[Gordion 2 ca. 1980].	7

[Gordion 3 ca. 1980].	7
[Gordion 4 ca. 1980].	7
[Gordion 5 ca. 1980].	7
Hajji Firuz/Artwork [Photos/Slides].	7
Tell-Es-Sa'Idiyeh [ca. 1980].	7
	Box
T'es Sad.	7
Destructive Tests [1992-1997].	7
Hajji Firuz WG Macros.	7
[Hajji Firuz 1987].	7
Faunal for Museum History.	7
Faunal Section.	7
Faunal Lab (Plans).	7
MASCA Research [1988-89].	7
[Tell es-Sweyhat Preliminary Report].	7
Crabtree/Monge Pig Figurine Photos.	7
List of Field-Trips, Surveys by MASCA Staff to 1976.	7
[African Disease Project 2006].	7
[Info to add to African Disease Database 2006].	7

