

INSTITUTE OF ARCHAEOLOGY, SLOVAK ACADEMY OF SCIENCES
VEDA, PUBLISHING HOUSE OF THE SLOVAK ACADEMY
OF SCIENCES

MEDIEVAL ARCHERY EQUIPMENT FROM THE TERRITORY OF SLOVAKIA

Michal Holeščák

This publication was created as a sustainability impact indicator of the project
"Research centre of the oldest history of the Middle Danube region" (ITMS: 26220120059),
with the support of the Slovak Research and Development Agency under the contract No. APVV-15-0330
and Scientific grant agency of the Ministry of education of the Slovak Republic and Slovak academy of sciences
(projects VEGA nr. 2/0075/16 and 2/0037/17)

Publishing of this book has been financially supported by the Slovak Academy of Sciences
upon recommendation of the Editorial Board of the SAS.

NITRA 2019

Michal Holeščák

MEDIEVAL ARCHERY EQUIPMENT
FROM THE TERRITORY OF SLOVAKIA

Nitra 2019

Archaeologica Slovaca Monographiae
Studia, Tomus XXXI

Chef editor	doc. PhDr. Matej Ruttkay, CSc.
Reviewers	Mgr. Tomáš König, PhD. Mgr. Petr Žákovský, PhD.
English translation	Mgr. Michal Holeščák, PhD.
Russian translation	Dr. Tibor Máčay
Layout	Beáta Jančíková
Cover	Beáta Jančíková
Print	VEDA, Publishing House of the SAS, Centre of Operations of the SAS, Dúbravská cesta 5820/9, 841 04 Bratislava, in 2019 as its 4426 th publication. www.veda.sav.sk

Expands	Archeologický ústav SAV Akademická 2 SK – 949 21 Nitra tel.: +421/37/6943 209 e-mail: nraukniz@savba.sk
---------	--

Publisher



© Michal Holeščák, Institute of Archaeology SAS, 2019

© VEDA, Publishing House of the SAS, 2019

ISBN 978-80-8196-033-8 (Institute of Archaeology of the SAS)

ISBN 978-80-224-1744-0 (VEDA, Publishing House of the SAS)

CONTENTS

PREFACE	7
1 METHODOLOGY	9
1.1 Definition of geographical area and chronological period	10
1.2 Source criticism and methodology	10
2 BOW	11
2.1 Self-bow	13
2.2 Composite bow	14
2.2.1 Composite bow of the Avar type	18
2.2.2 Composite bow of the Hungarian type	20
3 ARROW	22
3.1 Arrowhead typology	24
3.1.1 Blade cross-section – categories	25
3.1.2 Shape of the blade – variants	25
3.1.3 Attachment to the shaft	27
3.1.4 Specific traits of the arrowhead	28
3.2 Primary results of the arrowhead typology	29
3.2.1 Iron arrowheads	29
3.2.2 Bone arrowheads	57
4 SECONDARY ARCHERY EQUIPMENT	59
4.1 Quiver	59
4.1.2 Avar quiver	60
4.1.3 Hungarian quiver	62
4.1.4 Cuman quiver	64
4.2 Bowcase	64
4.2.1 Transport bowcase	65
4.2.2 Horseback bowcase	65
5 EVALUATION	67
5.1 Avar Kaghanate Period (7 th –8 th century)	67
5.1.1 Bow	68
5.1.2 Arrow	69
5.1.3 Equipment	70
5.2 Great Moravian Period (9 th century)	70
5.2.1 Bow	71
5.2.2 Arrow	71
5.2.3 Secondary equipment	73
5.3 Old Hungarian Period (10 th –11 th centuries)	73
5.3.1 Bow	74
5.3.2 Arrow	74
5.3.3 Secondary equipment	76

5.4 Hungarian kingdom (12 th –14 th century)	76
5.4.1 Bow	77
5.4.2 Arrow	78
5.4.3 Secondary equipment	80
6 SUMMARY	81
Výbava stredovekého lukostrelca na území dnešného Slovenska SÚHRN	83
Средневековое снаряжение для стрельбы из лука с территории Словакии РЕЗЮМЕ	87
SOURCES	91
LIST OF THE SITES NUMBERED IN MAPS	102