

## **Abstract**

The aim of this thesis is to describe the origin of bone markers that characterize individuals who throw habitually and the usability of these markers in research of past populations. The thesis also summarizes knowledge of the origin and development of projectile weapons in Pleistocene. The effectiveness (accuracy and speed) of throw is probably related to differences in morphology of pectoral girdle, torso and hand. Therefore, a part of the text summarizes the morphology of pectoral girdle, torso and hand in the species *H. erectus*, which was probably the first group of hominins able to throw with effectiveness close to the one of anatomically modern humans. The development of projectile technology, which came after the adoption of effective throwing ability, is usually inferred from archaeological findings of spears and arrows. Various interpretations of archaeologically found weapons bring different conclusions regarding the usage of these weapons. The usage may be inferred from bone characteristics originating as consequences of moves that individual executes when manipulating weapons.