CONCESSION AREA "BOYADZHIK"

/USING GIS TECHNOLOGY FOR PROTECTING OF CULTURE HERITAGE/

Stefan Bakardzhiev¹ Todor Valchev¹ Yavor Rusev¹

¹Regional historical museum – Yambol, **Bulgaria**

ABSTRACT - In 2011 team from Regional historical museum — Yambol made search for archaeological sites in concession area "Boyadzhik". It's finding in the territory of villages Boyadzhik, Galabintsi and Zlatari in Tundzha Municipality. Its area is 8.5 sq. km. The team of RHM — Yambol is one of the pioneers in the country which start to use information technologies during the field survey. Before the beginning of the field surveys have made map of the area by combined of satellite image and military topographic map. On it has marked the visible sites: Kartozhebenskata and Tyurkmenskata settlement mounds, fortress near Boyadzhik, the monastery "Sv. Georgi" and one burial mound.

According to the environmental conditions were used intensive and extensive surveys. The first is employed when the visibility on the surface over 50%. The members of the team survey the territory with steady rate. Between each of them have 20 m distance. During the extensive survey the walker spacing is increased on 25 m – the maximum distance allowing easy communication. In the result of the field survey are registered eight flat sites, one monastery and one burial mound.

Keywords: Boyadzhik, Yambol, field survey, flat site, GIS.

INTRODUCTION

In the autumn of 2011 year team from Regional historical museum — Yambol made investigation for archaeological sites in concession area "Boyadzhik". The company has decided to make quarries. The area is finding in the territory of villages Boyadzhik, Galabintsi and Zlatari in Tundzha Municipality, Yambol Region. The area of 8.5 sq. km has been surveyed for 5 days from 21-st to 25-th of November.

METHODOLOGY

The team of Regional historical museum – Yambol is one of the pioneers in the country which start to use information technologies during the field survey of archaeological sites and protecting on archaeological culture values. In 2008 year began Tundzha Regional Archaeological Project (TRAP). The international project in Yambol region is leaded by Shown Ross, Adela Sobotkova, Iliya Iliev and Stefan Bakardzhiev. Its aims are connected with deploy of new, modern, non-destructive field methods: surveys, satellite remove sensing, relation databases, mobile computing and geographic information systems [1].

Methods, used during the field surveys varied according to the environmental conditions. The team used intensive and extensive surveys. The first is employed when the visibility on the surface over 50%. The members of the team survey the territory with steady rate using 20 m walking spacing and 20 m interval between them. By this way are created 20x20 m units. Artifacts were count and record at the end of each unit. One polygon contain from 4x4 to 6x6 units – depending on the participants. During the extensive survey the walker spacing is increased on 25 m – this is the maximum distance allowing easy communication during walking process [1].

Archaeological sites, without pottery concentration, were record with GPS point, photographs and description, including the condition of the site [1].

PRELIMINARY PREPARATION

Before the beginning of the field surveys in concession area Boyadzhik have made map of the area by combined of satellite image and military topographic map (Fig. 1). On it has marked the visible sites: Kartozhebenskata and Tyurkmenskata settlement mounds, fortress near Boyadzhik, the monastery "Sv. Georgi" and one burial mound. The last two find oneself in the surveyed area.

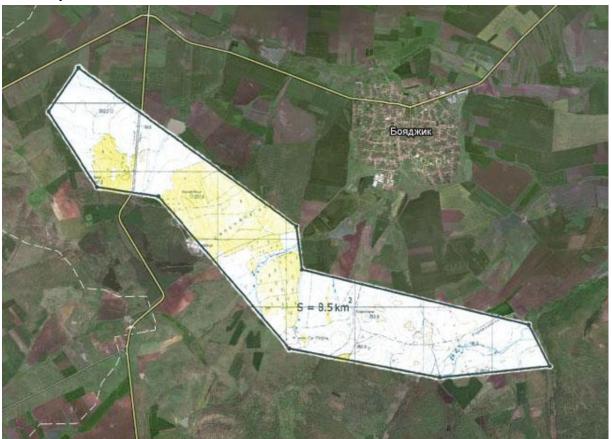


Fig. 1

FIELD SURVEY

In the process of work have been registered totally 10 archaeological sites: 8 settlements, a monastery and a burial mound.

Settlement 1 has area from 0.4 ha (Fig. 2). On the surface has found typical glaze ceramic. The pottery materials dated the site in 15-th - 16-th c. [2].

The area of the second settlement is 0.17 ha (Fig. 3). It's dated in the period of the late Antique. The ceramic finds include pieces from plates and amphorae. They are typical for this period of development of the humans [3]. During the field survey has been found and two flint tools.

Third settlement has area from 0.4 ha (Fig. 4). During the survey has found handmade and wheel-made pottery. There have pieces from pots, plates and storage vessels. Some of them have decorations from incised lines and stick ornaments. On the base of the finds the site is dating to the Early Iron Age and Antique [3, 4, 5, 6].

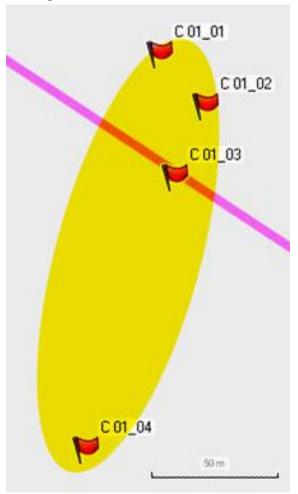
Settlement 4 covered area from 19 ha (Fig. 5). The flat site is situated on the south-west coast of one small river. According to the pottery materials here has two periods of inhabit: Bronze

Age and Antiquity. The hand-made pottery includes pots and storage vessels, while in the ceramic material from the second phase of inhabit dominated amphorae, pots and plates [3, 8]. The fifth settlement has area from 0.17 ha (Fig. 6). On the surface has found wheel-made pottery. It has fragments from pots and amphorae. They belong to the Antique period [3, 7].

Settlement six represent open-air village from the Bronze Age and Antique period. Its area is 1.64 ha (Fig. 7). During the survey has been found typical hand-made pottery from the earlier period. The decoration of ceramic assemblage includes incised lines and holes, and stamps with circles [8]. The wheel-made pottery from the Antique period includes pieces from pots, jugs and amphorae [3, 7]. On the field Yambol team established horizontal stratigraphy. In the western part of the flat site dominated later materials. On the field has been found flint and stone tools, too.

The area of settlement 7 is 0.7 ha (Fig. 8). On the surface has found pieces from amphora and storage vessel. The pottery material permits to date the site in the Antique period 4-th - 6-th c. [3]. During the survey has been found and some pieces from metal slag.

The last settlement is situated south-east from the dam lake. Its area is 6.75 ha (Fig. 10). On the surface is visible hand-made and wheel-made pottery. There have fragments from pots, plates, bowls and storage vessels. Some of them are decorated with stamp ornaments – circles and lines, channels and incised lines. The ceramic materials date the site in the Early and Late Iron Ages [4, 5, 6].



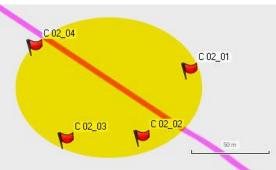


Fig. 3

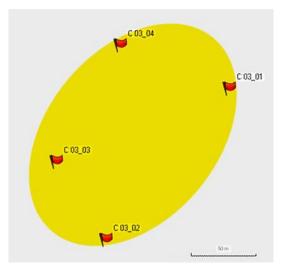


Fig. 2 Fig. 4

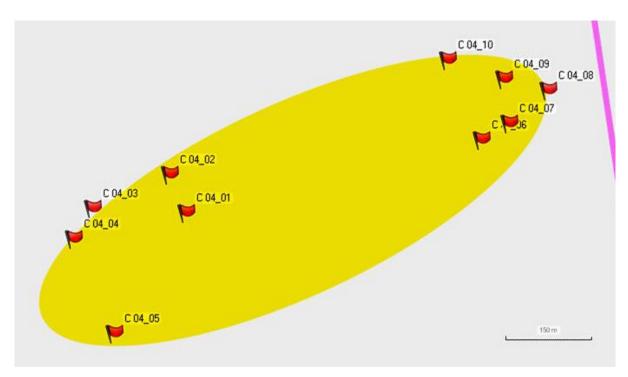


Fig. 5

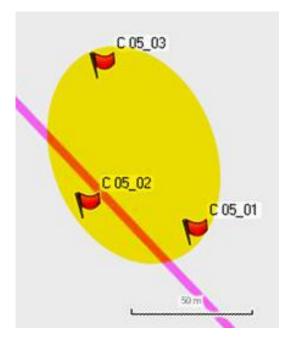


Fig. 6

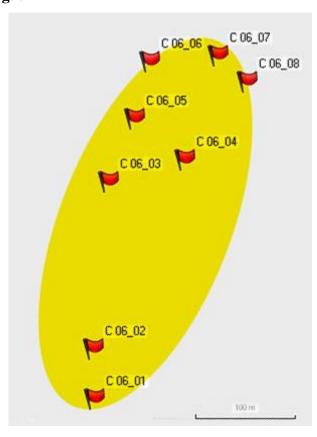
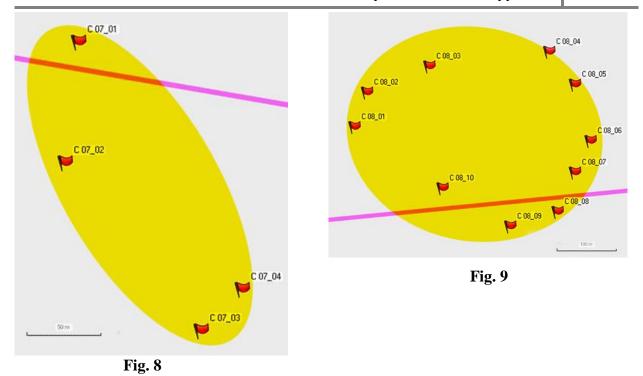


Fig. 7



The monastery "Sv. Georgi" is situated south-east from village Boyadzhik. Now here have one restored temple from the end of 19-th c. According to the text on the church the temple is built on the place, discovered during a dream. During the visit of the site is registered fortification wall built with small- and medium-size chopped stones connected with white mortar. Its height is 1.2 - 1.4 m and its width is 2.6 m. The wall is kept on different length as the maximal is 12 m. It surround 4.64 ha area (Fig. 10). The monastery is situated in the foothill of the Boyadzhik fortress which dating in the late Antique and Medieval periods. North-east from the site is flat settlement N = 6 (Fig.11).

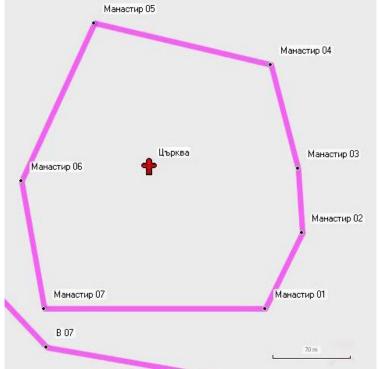


Fig. 10



Fig. 11

The burial mound is small with height 0.8 m and diameter 18 m. It's situated on one hill. During the visit there have no destruction from treasure-hunters.

RESULTS

In the result of the field survey in concession area "Boyadzhik" are registered eight flat sites, one monastery and one burial mound. They belong to different historical periods from the Bronze Age to the 17 c. The use of information technologies during the field survey permit to mark better the area of the archaeological sites. This one will help for better protecting on immovable culture values.

REFERENCES

- [1] Iliev, Il.; Sh. Ross; A. Sobotkova; St. Bakardzhiev & S. Connor. The Tundzha Regional Archaeological Project (Elhovo Survey). Yambol, 2012.
- [2] Плетньов, В. Битовата керамика във Варна XV XVIII век. Варна, 2004.
- [3] Кузманов, Г. Ранновизантийска керамика от Тракия и Дакия (IV началото на VII в.). Разкопки и проучвания, XIII, София, 1985.
- [4] Стоянов, Т.; К. Ников. Спасителни сондажни проучвания на обекти от ранножелязната епоха до с. Рогозино, Харманлийско. Годишник на Софийския университет "Св. Климент Охридски" Исторически факултет специалност археология, 2, 2003, стр. 7-92.
- [5] Нехризов, Г. Класификационна схема на керамиката от ранната желязна епоха в източните Родопи. Сборник "Phosphorion Studia in honorem Mariae Čičicova". София, 2008, стр. 114-132.
- [6] Нехризов, Г.; Ю. Цветкова. Ритуални ями от желязната епоха при Свиленград. Спасителни археологически разкопки по трасето на железопътна линия Пловдив Свиленград през 2005 г. Велико Търново, 2008, стр. 331-493.

- [7] Кабакчиева, Γ . Керамика от вилата при Ивайловград, II-IV в. Разкопки и проучвания, XV, София, 1986.
- [8] Лещаков, Кр. Бронзовата епоха в Горнотракийската низина. Годишник на Софийския университет "Св. Климент Охридски" Исторически факултет специалност Археология, 3, 2006, стр. 141-216.