

# Pasportization of Urban Greenery and Approaches to Urban Greenery

Lenka Rajmontová

Consultant: RNDr. Michal Hruška

First Private Language Grammar School in Hradec Králové, the Czech Republic

## 1 Introduction

Public greenery is one of the most important parts of the human habitat. Greater environmental attention must be paid to its status. Particularly in urban agglomerations, care has an important role to play. Therefore, it is important to focus on its passportization - keeping track of other systems, such as GIS, and setting up rules for its maintenance.

## 2 Issues

In the practical part, the system of inventory and maintenance of greenery in Hradec Králové was mapped. The history of the care of urban greenery started in 1851. Now it already uses the GIS system. The current management of the green system has a long history but seems ineffective. The evidence, the amount of recorded data and the low up-to-date information suggest that the system being used has its drawbacks and is not optimally set up and used.

## 3 Practical part

After exploring a large number of locations, two of them were chosen - one as a demonstration of excellent care for greenery, the other as an example of inappropriate greenery maintenance. These sites have been monitored in the long term from 2013 to 2017, and the measurements of the quality of the monitored greenery were carried out according to a predetermined methodology. The individual elements were also recorded in the maps as shown in photo documentation. (Figure 2)



Figure 1 – site illustrations

## 4 Online application

By tracking and measuring in selected locations, it has been verified which data and scopes are appropriate for an efficient and sustainable urban greenery recording

system. A review of the existing recorded data has been made and a mobile application has been developed to access online data including the possibility to immediately add new data or display historical data relating to the selected element or specific locations. This newly developed and configured system provides a comfortable and effective solution to this problem. The example is shown in Fig. 2.



Figure 2 - Mobile app

## 5 Conclusion

The result of the long-term work was to set the current GIS green inventory system to the optimal level and to complement it with an online application that shifts the use of the existing system to a significantly higher level.

## 6 Literature

1. KRÁTKÝ, J. *Urbanistická kompozice Hradce Králové*. Hradec Králové: Pedagogická fakulta, 1990, 186 s.
2. ONDŘEJOVÁ, V. *Metody zjišťování plošného rozsahu a druhů zeleně a návrh způsobu vedení evidence zeleně*. Půhonice: Výzkumný a šlechtitelský ústav okrasného zahradnictví, 1977, 1