100% Inventory Methods for Urban Parks in Khmelnitsky, Ukraine

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This paper presents methods for conducting 100% urban park inventories in Khmelnitsky, Ukraine and generalizes these methods to fit urban parks all over Ukraine. Figure ES 1 shows the main steps for conducting a 100% inventory in Khmelnitsky, Ukraine.

In step A, all relevant information for the inventory, such as inventory objectives, budget, personnel, deadlines, park documents and maps, is collected. The type of inventory and what is to be inventoried is decided upon after all of the collected information is assessed. The forms to record the inventory information can be made and copied. Inventory equipment is located. The officials who are requesting the inventory will need to be consulted throughout the inventory process.

Step B is the survey of the park's boundary. One must decide if the park is to be subdivided into sections for easier data collection. Any questionable boundary lines are discussed with the officials who requested the inventory and determined. The base maps are created.

Step C is the actual inventory. All tree information and any other requested information about the parks is gathered. All of this information is entered into the inventory forms and mapped.

Step D is to complete data entry into a computer, if used, and to check all maps and inventory forms for errors. The errors are corrected. The information is analyzed and the final copies of the maps and the final report are prepared.

The methods presented were developed through trial and error, based on national and local limitations. Several limitations were discovered. Information and trained urban foresters are hard to find and expensive. Volunteerism has bad connotations, so few people volunteer. GPS is generally not allowed or is not financially feasible. Legal versions of GIS programs are too costly for the average Ukrainian organization and Ukraine lacks trained personnel to run these programs. Basic forestry equipment is not readily available to the public. Ukraine has never had a national land survey performed, so no benchmarks or marked property lines are present.

These limitations dictated that the inventory methods had to be simple, adaptable, and easy to use by non-foresters. With Ukraine's economic and political growth, the limitations will disappear along with these methods and more technologically advanced urban forestry systems will be adopted. When this happens, the information gathered with these inventory methods can be used as the base line for future inventories.