

Locating Hot-Spots - to preserve Natural Biodiversity in Israel





Project File: Locating Hot-Spots - to preserve Natural Biodiversity in Israel

Objective:

To locate and classify 'hot-spots' vitally important and threatened open spaces essential for biodiversity, ecosystems and the landscapes' heritage.

Background:

Biodiversity is the foundation of all life processes and ecosystem services that are essential for human subsistence, health and welfare. Biodiversity includes nature, the landscape and all ecosystems. To ensure their continued existence open spaces must be kept intact and contiguous, especially priority sites with high value biodiversity present, known by the conservation community as hotspots.

The current Protected Areas System in Israel is not sufficient to identify and protect all hotspots. Information and knowledge about open spaces and ecosystems are collected and analyzed in different settings which include: Survey and evaluations of Nature and Landscapes, conducted by the Open Landscape Institute (OLI) with the cooperation of conservation and land management organizations such as the Israel Nature and Parks Authority (INPA), JNF-KKL, Tel Aviv University; the Ministry of Environmental Protection; the "red book" which provides information on rare and endangered animal species; SPNI; universities and local groups.

Based on the available information it is apparent that natural habitats in Israel are not adequately protected and this is critical for the existence of their biodiversity and the essential ecological services that they provide for the public's health and welfare.

The purpose of this work is to locate Israel's hotspots and classify them according to their value and risk factors. Work is needed to map and classify these sites according to criteria to set priorities for conservation. The outcome of this work will be a national map of critical sites and information on what is contained at each site such as the importance and value of the site along with statutory data and information on the priority for conservation. The project's findings will help the planning and land management authorities and the newly established National Foundation for the Preservation of Open Spaces maintain Israel's open spaces and biodiversity for the benefit of the public's welfare.

This project represents another step in the national plan to save biodiversity (Ministry of Environmental Protection, Jan 2010) which indicated the need to prepare a number of action plans (National Master Plan Update, etc.) since it creates the knowledge infrastructure for the implementation of these plans. It is important to note that locating hotspots, such as Limestone hills, wetlands, winter ponds and oases, does not detract from the importance of the area surrounding the sites. This is because ecosystems depend on continuous, and not fragmented, open spaces.



Project Milestone and Phases:

1. Creation of a professional multi-disciplinary and inter-organizational steering committee to guide the implementation of the project. The committee will include experts and representatives of organizations that manage open spaces including INPA, The Foundation for the Preservation of Open Spaces, JNF-KKL, Ministry of Environmental Protection
2. Creation and operation of professional team to work as part of the Open Landscape Institute which include professionals in the following fields: ecology, planning and landscape design experienced in conducting surveys and evaluating open spaces, nature, the landscape's heritage, and GIS specialists.
3. Formation of methodology, criteria and indicators for the survey on the following topics:
 - 3.1 Locating and identifying hotspots
 - 3.2 Categorizing sites according to criteria, ecological sensitivity and risk factors
 - 3.3 Setting Priorities for the projects
4. Locating and mapping of important conservation areas in the following ways:
 - 4.1 Collecting and analyzing existing relevant databases including: OLI, INPA, Ministry of Environmental Protection, Universities; surveys, research studies, "red book" of endangered species, planning documents
 - 4.2 Collecting and analyzing information from land managers, field personnel and experts including botanists, zoologists and geologists
 - 4.3 Validation of information based on field work
5. Analysis of information and classification of areas according to their value, ecological sensitivity and urgency for preserving according to criteria approved by the Steering Committee
6. Mapping of areas identified through GIS
 - 6.1 Initial mapping of locations through symbols
 - 6.2 Mapping boundaries of each location after site visit
7. Preparation of a report containing the information gathered together with recommendations of how to maintain these open spaces
8. Publication of a report on the findings of the study which will be delivered to the planning and land-management authorities mentioned above and planning and conservation organizations in hard-copy and digital formats.

Timeline:

Stages 1-5 – 6 months

Stages 6-8 – 18 months



OLI-Open Landscape Institute

Deliverables:

1. Maps of "Hot-Spots": sites vital for conservation classified according to their ecological and aesthetic value, urgency of need and land use
2. List of all sites identified and their classifications
3. Portfolio of each site describing their importance sensitivity, urgency of need, and conservation importance for the public's welfare
4. Portfolio will include recommendations for the conservation and management of each site. This will also be presented digitally and available for download.
5. Summary of the work processes and findings in hard copy and digital formats.