

Dividing the Negev into ecological units

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Israel Nature & Parks Authority divided Israel into 23 natural terrestrial ecosystems, to be used as a working tool for the authorities to identify under-protected & threatened ecosystems, establish planning priorities, advance protection plans, and serve as a basis for management & monitoring procedures. This national scale mapping was found to be too coarse at the regional level management & conservation efforts in the arid area of Israel, the Negev.

We therefore conducted a more detailed characterization & mapping of this region, based on the collection, analysis & integration of existing literature, databases, landscape surveys, available GIS layers, remote sensing aids, and two rounds of expert workshops. Five major ecosystems were defined, based on the strongest identified ecological factor: two based on the amount of precipitation – Arid desert scrublands and Hyper-arid desert; and three based on soil composition – Internal sandy patches, Loess patches and Salinas. These were subsequently divided based on geography, geology, pedology, geomorphology, landscape & botany. Botanic characterization included: general vegetation forms; and lists of dominant, endangered, rare & endemic species.

This work will be used to conduct detailed statutory planning of future protected areas, prepare monitoring programs & conduct efficient management steps at the Negev open landscapes.