



The Paleo-Anthropocene in the East Mediterranean

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The East Mediterranean region is located in a transition zone between the sub-humid Mediterranean climate and the semi-arid and arid climates. During the last few Millennia, this area has witnessed human activities at various levels of intensity that have affected the landscape system evolution. For this reason, the given region is an excellent example of an anthropogenic landscape that has been shaped since the Paleo-Anthropocene and until today.

The lecture will present a few milestones that demonstrate the ancient anthropogenic impact on various landscape components including physical structure and vegetation and fauna composition and patterns.

Physical structure

Site density increased dramatically from prehistoric times through to the Byzantine period, when it reached more than 5 sites/km². Agricultural terraces cover more than 50% of the slopes in the main ridge slope.

Vegetation patterns and composition

Ancient activities that altered the physical structure had an impact on vegetation patterns that remain visible today. Human land use over history changed the vegetation composition, as revealed in archaeobotanical finds and pollen analysis. For example, changes in conditions during the Neolithic period, at the beginning of agriculture, can be seen by the appearance of weeds. In later periods, the planting of olive trees changed the vegetation composition which has an effect until today. The area also underwent human transitions, as many cultures appeared and inhabited the area. These cultures at times brought with them plants associated specifically with these cultures (e.g. the Philistines).

Fauna extinction and invasion

There are a few example of species extinction that occurred in the past as a result of mass hunting and killing; for example, the extinction of the *Gazella subgutturosa* in North Syria. In addition, there is evidence that ancient cultures brought animal species with them. For example, the Philistines that came to the area during the early Iron Age brought with them the European Boar. This species eventually became the dominant type in the area, affecting other species as well.

All of these incidents are evidence of the ancient anthropogenic impact on the landscape in ancient times and until today.