

## THE EFFECT OF ECOLOGICAL PARAMETERS ON HABITAT SELECTION OF PLESKE'S GROUND JAY (*PODOCES PLESKEI*)

Mino Moshtaghi<sup>1</sup>, Vajiheh Ghasemi Ardaji<sup>2</sup>, Shoukofeh Farazandemehr<sup>2</sup>, Hadi Radnezhad<sup>3\*</sup>  
1-Young Researchers and Elite Club, Khorasgan (Isfahan) Branch, Islamic Azad University, Iran  
2- Environmental Science, faculty of agriculture and natural resource, Islamic Azad University Esfahan (khorasgan) branch, Esfahan.  
3- Department of Environmental Science, faculty of agriculture and natural resource, Islamic Azad University Esfahan (khorasgan) branch, Esfahan.  
\*h.radnezhad@khuisf.ac.ir

**Introduction:** Ecological parameters of each original habitat are very important factors for natural conservation. Abbasabd wild life refuge is the one of main habitats of Pleske's Ground Jay, a kind of bird which is endemic to Iran. This research aimed to study ecological parameters of this habitant.

**Method and material:** In this method with use of ARC GIS 9.3, we tried to review the maps of ecological parameters which influence the suitability of Pleske's Ground Jay habitat. These maps included other maps such as slope, direction, plant life, soil and the map of the species presence in different location which was recorded by GPS. Since in study of habitant suitability, it is necessary to omit the layers with more than 80% overlap from analysis process, we could analyze the correlation of mentioned layers with PCA analyzer.

**Result and conclusion:** The result of this study shows that the slope of this region is between 20-80% with height of 1000-1800 meters. It is mostly covered with shallow sandy soil and deep loamy and dominant plant life of this area are *Amygdalus- pistacia*. Plant life or vegetation cover is significant parameter in animal distribution. The study on location and presence of this bird showed that the plant life of plain is first important factor which affects this kind of bird. Therefore the decrease of plants and vegetation cover due to destruction of region and environmental changes can restrict the distribution of this species (Radnezhad, et.al. 2011). Consequently with evaluating capabilities of ecological layers, we can find out effectiveness levels of each mentioned factors.

**Key word:** habitat selection, *Podoces pleskei*, ecological parameters, Abbas abad



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