

Status and Population Structure of Audouin's Gull (*Larus audouinii*) Population in the North East Mediterranean and Its Relation with West Mediterranean Population

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Seabirds are located at the top of food web of coastal ecosystems, so the distribution and status of seabird populations are important indicators of the status of marine ecosystems and anthropogenic effects on them. Audouin's gull (*Larus audouinii*) has experienced a sharp population decline in 1960s. Although its western Mediterranean population has recovered; eastern Mediterranean population is still not stable and there is not enough information on dispersal of the species on Eastern Mediterranean coasts. Also, gene flow between eastern and western populations, relationship of these populations and potential effects of experienced bottlenecks are not well known.

We aimed at detecting breeding Audouin's gull colonies in East Mediterranean and elucidating the genetic structure of the existing population, gene flow among colonies and from western populations and phylogeny of the species by using microsatellite loci and mitochondrial D-Loop region. We surveyed all 21 islands and islets along the South East coastline of Turkey in May 2016. Habitat characteristics of islands and breeding bird colonies were recorded. Overall, one Audouin's gull, seven Yellow-legged gull (*Larus michahellis*) colonies have been recorded. Preliminary results show that nest density is highest on habitats covered by grass and herbs. Also, mammalian species introduced to islands by humans have negative effect on number of nests. Feather samples were taken from chicks of both species for genetic analyzes during the cruise. In addition to those samples, blood samples were taken from the Ebro Delta population. Genetic analyzes on microsatellite loci and sequence of mitochondrial D-Loop will reveal heterozygosity levels, gene flow, phylogeny of populations.