

Abstract:

Dinaric Karst region of the Balkan Peninsula is one of the hot spots of biodiversity, and it is characterized by a high degree of endemism of freshwater fishes. Numerous geological and climatic events have influenced the formation of the area and speciation. Karst poljes are the specific features of Dinaric Karst. They represent a specific ecosystem full of endemic species, where hydrogeological processes play an important role. The periodic flooding appears on poljes. It leads to activation of various underground channels and their interconnection. Twenty two endemic fish species have adapted to this regime. They live in underground waters or in surface waters part of the year and they can migrate between poljes through karst channels. They show significant reduction in size and change in complexity of scaliness. Scales are small and they are barely visible in some species. All these species and abundant underground karst fauna are threatened primarily by pollution, habitat destruction, and drainage of poljes.