





NEWSLETTER NO 1

Plant species distributions are constrained by abiotic and biotic factors e.g. local climate, geology, soils, hydrology, disturbance and interactions with other species. Among abiotic drivers, climate is recognized to strongly affect the distribution as plant species are not randomly distributed along environmental gradients but display species-specific tolerances shaping thus specific communities. In particular, it is recognized that climate can explain both species distribution and speciation.











The distribution of plant and animal species outside their natural distribution is a common phenomenon in a large number of countries all over the world. These species called 'Alien species' are non-indigenous species introduced to areas beyond their natural distribution by human activity.



These alien species adapt well if they are introduced in sites with climate similar to that in their natural distribution. Among these species a large number has invade in natural habitats in an increasing and alarming rate. These species become invasive (IAS) and pose substantial threats to agriculture, biodiversity and ecosystem services globally. These invasions









are considered as one of the major drivers of human-driven global environmental changes and its impacts have been predicted to increase even further under future climatic conditions. It's therefore crucial to understand the importance of future environmental factors in determining IAS distribution that would enable the quantification of these threats and inform the development of appropriate responses.

Under a global changing environment, the Black Sea is found in between the European and Asian crossroad and in the transition between the Mediterranean and North. A great number of stakeholders have developed economic activities around the Black Sea coastline, especially at the deltas, which are known for their density in population and growth potential (such as fishing, fisheries and aquacultures, tourism and recreation, farming etc).

Invasive Alien Species (IAS) is the central point on which this project focuses. The overall objective of the project is to establish and perform joint monitoring actions on IAS in Black Sea deltaic ecosystems of five countries (Georgia, Greece, Ukraine, Romania and Turkey) and assess their response under current and predicted climatic conditions.









The multifaceted character of the project area — deltaic ecosystems of different biogeographical zones, different protection status & management, cross-border or one-country owned — creates major challenges in regard to IAS management in a climate changing future in the Black Sea region. Under this assumption, IASON project is structured in a way that all challenges are approached under an integrated and cross-border manner.

In particular, the project's approach will consist of the following characteristics:









- Literature and historical data review to support the actions of the programme.
- Collection of information from stakeholders on the presence and problems caused by IAS.
- Compilation of the list of IAS.
- Development of common monitoring protocols and IAS risk assessment methodology.
- Recording and monitoring of IAS populations (two periods).
- IAS risk assessment based on current and future climatic conditions.
- Observatory establishment.
- Dissemination of knowledge information.











The specific objectives of the project are to:

- To develop and implement joint monitoring and risk assessment procedures on IAS in the project's nature protected areas and motivate and assist countries in creating their IAS inventories.
- To improve long-term cross-border collaboration, information and research capacity through using innovative technologies on IAS monitoring.
- To improve cooperation on IAS monitoring through the involvement of the public at various levels of the project.

Main results of the project will be to:

- Gain baseline data on IAS in the project deltaic areas, under current and predicted climatic conditions, through the implementation of joint cross-border monitoring and evaluation.
- The establishment of an organizational structure (Observatory) through which ICT services will be provided not only on IAS monitoring and assessments (information & research capacity) but also on networking with/and engaging citizens towards improving and using updated results of the project (institutional capacity).
- Cross-border collaboration and exchange of information from developing and implementing information and communication activities, at all levels of society (education, managers, policy makers, local community).

