

How to discuss on ostracodes along a nature trail: the project of “Risorgive dello Stella” (Udine, Friuli Venezia Giulia)

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After the Last Glacial Maximum, the continuous emergence of karstic waters coming from the Julian Alps produced wide wetlands (springs, peat-bogs, swamps, rivers) in the southern plain of Friuli. Most of these environments were widely present in the early last century. Subsequently, in the last century, the big reclamations of the '30s and the '50s have irreversibly compromised these areas and turned them into plantations of corns and hybrid poplar.

More recently, the spreading and the rise of a new environmental awareness have allowed local governments and some agricultural enterprises to implement project planning the objectives of the restoration and enhancement of these areas (parks, SIC, educational farms).

In this context the cultural tourism should become an essential tool for sustainable economy through the education of the environment. The knowledge of our environment and its respect may begin through natural itineraries close to home. A trail in the fresh water wetlands along the headwaters of the Stella river can become an useful tool for these objectives. Springs, peat-bogs and swamps may attract the visitors who are able to appreciate plants, cows and horses there grazing, and the typical biodiversity of these environments. Usually, the better known elements of the environment are those that are seen with the naked eye.

The first aim concerns the identification of the organisms there living. A simple determination key is proposed on the basis of their evident morphological features. The identification must reach a basic level so as to recognize a gastropod, a bivalve and so on.

The second aim plans to evidence the existence of the microscopic world, which is almost unknown to a wide. Yet, microscopic organisms are often abundant and probably have marked many milestones of the history of life. How much information can be gathered from their identification and their knowledge?

The key also requires the identification of ostracodes, thecamoebians, characean girogonites, etc. Once identified, the ostracodes might become useful tools to interpret the conditions of the environments. Depending of the season, the observation points of the springs of the Stella river trail present different conditions. Wintertime, wetlands show an ice cover; summertime, they may become dry. Sometimes, the environment may be stagnant or current. Thus, the trail can touch topics concerning a kind of extreme environment. What are the survival strategies of organisms? Ostracodes may present good examples to discuss the topic with the visitors and find a response. Ice cover allows a favorable temperature of the water below for the life; resistant eggs can overcome the dry conditions waiting for their hatching. Stagnant waters allow the life for good swimmers (i.e. *Cypria ophthalmica*, *Cypridopsis vidua*); current waters also present strictly benthic ostracodes (*Ilyocypris gibba*). Thus, the visitors can enter the field of ecology and evaluate the morphological adaptations to different environmental conditions. They can ask questions. What is the carapace shape of the ostracodes swimmers in stagnant waters? What is the shape of those strictly benthonic in current waters? They are able to give answers: rounded or subrectangular shape, respectively. Moreover, the visitors can enter the actuopalaeontological field. For the same environment, the adaptive strategies of the modern ostracodes repeat those of ancient and fossil species. This concept should open wide discussions which might be very attractive for the public.