

## **Kayaking Ecologists. Provisional Programme\***

### **7 September 2020**

#### **15:00 – 19:00 - 'Le Cesine' Natural Reserve**

Presentation of the initiative and seminar on the theory and practice, and the procedures and methods used to monitor the health of coastal and marine aquatic ecosystems.

The introduction to the Kayaking Ecologists initiative was made by the Rector of the University of Salento **Fabio Pollice**, Sustainability Director **Alberto Basset**, "Le Cesine" WWF Oasis Manager **Giuseppe De Matteis**, the Mayor of Vernole **Francesco Leo**, and Commander of the Biodiversity Protection Unit of the San Cataldo Forest Carabinieri **Leonardo Antonaci**.

Shortly after, a practical demonstration of the methods and procedures employed in the monitoring exercise was presented for the students involved in the initiative in the 'Pantani' area within the Reserve, which continued up until 6:00pm.

### **15 September 2020**

#### **08:30 – 18:30 - Roca – Torre Sant'Andrea**

Kayaking Ecologists – First stage of hands-on coastal monitoring post COVID-19

### **25 September 2020\***

#### **08:30 – 18:30 - Torre Sant'Andrea - Otranto**

Kayaking Ecologists - Second stage of hands-on coastal monitoring post COVID-19

### **26 September 2020\***

#### **10:30 – 18:30 - Castro – Tricase Porto**

Kayaking Ecologists - Third stage of hands-on coastal monitoring post COVID-19

\*Programming of the phases of Kayaking Ecologists is subject to variations according to prevailing weather conditions. The dates above are provisional and might well be changed without notice.

## **Sea Activities**

Along the route, students will take samples every day at 8 research stations, following two lines parallel to the coast at 25m and 75m respectively, to evaluate levels of nutrients, pollutants and microplastics from terrestrial and fresh water ecosystems along the coast.

Throughout the route the following evaluations and specimen collections will take place in the established sampling stations:

- a. Determining the principal chemico-physical characteristics of the surface layer of the water column, along horizontal transects parallel to the coast. The measurements will be carried out with multiparameter probes;
- b. Sampling of phytoplankton and zooplankton elements in the water column with fine mesh nets (20 $\mu$  and 200 $\mu$ ) to allow an analysis of the plankton guilds;
- c. Determining the level of primary productivity by incubating for 6 hours water samples collected at two different distances from the coast, using 'the clear bottle and the dark bottle' method, to analyse the functions of the plankton guilds;
- d. Determining at the sampling stations the chemico-physical characteristics of waters taken in vertical transects from the surface to the seabed with multiparameter probes;
- e. Collection of water specimens at the sampling stations for analysis of micro/nano plastics and potential chemical pollutants;
- f. Practical training in the examination of soft bottom coastal areas and functional characteristics of benthic components through extraction and analysis of sediment cores and measures of flow in benthic chambers.



**Promoter:** University of Salento

**Co-Promoters:** LifeWatch Italy, CIHEAM Bari (Tricase branch), WWF Oasis, Legambiente, Town Council of Melendugno, City Council di Otranto, Museum of Ecology in Mediterranean Ecosystems – Faro di Punta Palascia