

# Coastal Fieldwork

The DQSE Biology syllabus indicates the use of diverse fieldworks during the scholastic year. The idea of introducing a coastal fieldwork arose from the need to expose Biology students to the theory and practice of coastal and marine ecosystems.

In 2014, the organisation 'Plastic Oceans' participated in sea plastic cleaning events organised by local NGOs.

This interaction has further encouraged the Biology section, DQSE, to promote these activities by the production of a coastal fieldwork booklet which makes students aware of the coastal biological diversity and the human impact on this environment.



## **This fieldwork activity encourages secondary Biology students to:**

1. appreciate that plastic pollution is unsightly, undesirable and harmful to several organisms whether terrestrial or aquatic. The choice of using a nudles study increases the awareness that harmful plastics may not be easily observed, but may still be detrimental to organisms. A summary of the harmful effects of nudles can be introduced through <http://www.youtube.com/watch?v=KpVpJsDjWj8>.
2. observe, identify and explore the rocky coast enabling students to recognise local, native and endemic species as well as identifying relationship patterns between organisms.

## **The coastal fieldwork booklet is divided into 3 main sections:**

1. Student's Booklet:
  - Task A: Assessing nudles contamination on a sandy beach*
  - Task B: An investigation of a rocky shore*
2. Teacher's Notes
3. Appendix: Maps and areas of suggested locations.



## **The main learning objectives include:**

1. Using different sampling techniques including quadrats and belt transect.
2. Develop skills including observational skills, data handling, analysis and presentation of results.
3. Recognise different organisms in the coastal ecosystem and their role within the ecosystem.
4. Relate theoretical knowledge to a local context.

During the scholastic year, two pilot studies were carried out in different locations and the final version of this coastal fieldwork booklet will be presented to biology teachers during the July 2015 professional development inset.