ECOLOGY ACTIVITY

Background:

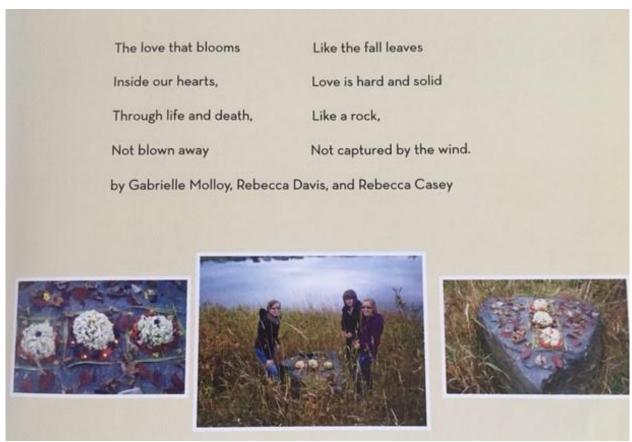
This is an interdisciplinary activity that can be done with science 1206 classes but it can be done, in part or whole, with any class, at any level, especially those studying ecology.

It combines science (ecology), art and poetry. The ecology activity can be done for either a terrestrial or marine ecosystem or both.

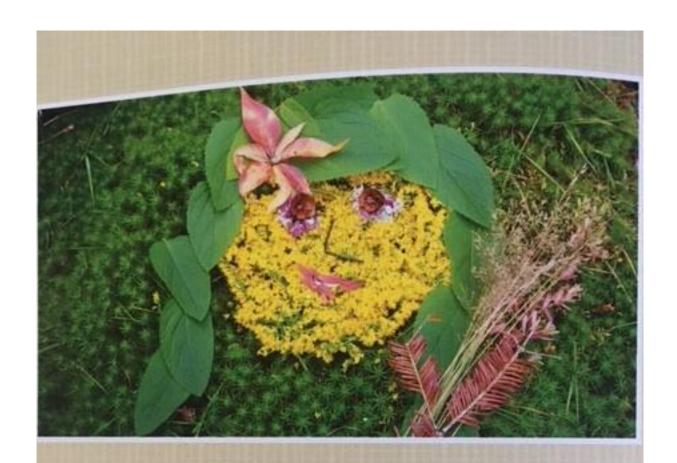
For the art and poetry sections students are asked to collect natural materials and produce a piece of "eco-art". They are then required to write a poem that relates to that piece. The art and poem can be presented in various ways. For example they can be combined into a poster, a book or website. The activity can be part of a field trip to a local natural area or simply done in the school yard.

Here are some examples from 2 books produced by science 1206 class from Bishops College in 2011-12 (The Love that Blooms) and 2014-15 (Mother Nature). (Apologies for the quality as these are pictures from the actual books).

Enjoy! Yvonne Dawe, president: Math Science Special Interest Council



The Love that Blooms



Mother nature, frolics in the forest luscious leaves and greenery soft moss as a bed, face of goldenrod Flower in hair, pink and precious Bright eyes and wand in hand Mother nature, spreading life open arms to the sun flowers blossom from her tender touch heart of orchids and lilacs Spring has come again

By Maddy Walsh, Meagan O'Leary, Ethan Skanes and Kennedy Menchinton

Mother Nature

Science 1206 Ecology Lab

| NAMES: | | | |
|---|---|-------------------------|-------------------------|
| PART 1: ECOLOGY L | AB: A TERRESTRIAL E | COSYSTEM | |
| Purpose: | | | |
| 1. To identify the abiotic con | ponents and the differe | nt types of organisms o | of a forest ecosystem. |
| 2. To create a piece of "eco" | art from the natural mat | erials collected. | |
| Procedure: 1. Record examples of 2. Collect natural mater of the art. 3. Record any thoughts | ials from the area and fo | orm into a piece of eco | art. Take several pictu |
| Results: | | | |
| <u>Table 1:</u> List of abiotic con and type of organ | nponents of the forest ism (producer, herbive | | |
| Abiotic Components | Organism | | of Organism |
| | | | |
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| | | | |
| | | | |
| | | | |
| | | | |
| Analysis: Design a food cha | oin (with 2 lovels) based | on the organisms sho | |
| Analysis. Design a rood ch | | on the organisms obse | = Tred |
| | | | |
| <u>-</u> | | | |
| Table 2: Record of though | s and/or feelings (to a | ssist in writing a poe | <u>m)</u> |
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PART 2: ECOLOGY LAB: A MARINE ECOSYSTEM

Purpose:

- 1. To identify the abiotic components and the different types of organisms of a marine ecosystem.
- 2. To identify any invasive (alien, exotic) species present in the ecosystem.

Results:

<u>Table 1:</u> List of abiotic components of the marine ecosystem, organisms observed there and type of organism (producer, herbivore, carnivore, omnivore)

| and type of organism (produces, menores, cannot etc.) | | | | | |
|---|------------------|--|--|--|--|
| Organism | Type of Organism | | | | |
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Give 2 examples of invasive species that exist in the local marine environment.

| Analysis: Design a food chain (with 3 levels) based on the organisms observed | | | | | | |
|---|--|--|--|--|--|--|
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| Given 2 negative effects invasive species can have on an ecosystem: | | | | | | |
| (1) | | | | | | |
| | | | | | | |
| (2) | | | | | | |