

# Heritage & Habitat in Your Community



An educational project of

Donegal County Council, Donegal Education Centre & The Heritage Council

## Fieldtrip to the Rocky Shore

#### **Basic Details**

| Names of Students or   | ו |                    |  |
|------------------------|---|--------------------|--|
| Team :                 |   |                    |  |
| Date of Fieldtrip:     |   |                    |  |
|                        |   |                    |  |
| Time Fieldtrip         |   | Time Fieldtrip     |  |
| Started:               |   | Finished:          |  |
| Name of Study Site:    |   |                    |  |
| Location of Study Site | : |                    |  |
| Tide Condition:        |   | Weather Condition: |  |

### Exercise 1: Species of the Rocky Shore

We are going to use the quadrat to assess the various species of living things that may be found on the rocky shore. Firstly, lay down a transect (a measuring tape or marked rope will do) in a straight line from the shoreline to the upper shore. At regular intervals place the quadrat beside the transect and record the living things found within it. Use the table on the next page to record your results.

Using a clinometer (or metre sticks, rope and spirit level), measure the slope of the shore along the length of the transect.

#### Exercise 2: Living Things of Rock-Pools

Rock-pools are a very interesting feature of the rocky shore and can be very rich in life. They are formed when hollows and holes in the rough rocks are filled with water at high tide and this water is left behind when the tide goes back out. The species living here don't have to deal with being dried out like many other parts of the shore become but have to be able to live in warmer conditions as the pool's water is heated by the sun (see for yourself by dipping your hand in a pool!). Warm water holds less oxygen so they must be able to survive this, too. The water also becomes saltier as the water evaporates, leaving the salt behind. Nonetheless, rock-pools can hold many types of living things including seaweeds, crabs, urchins, anemones and even fish.

Starting at the shoreline, locate five rock-pools. At each, make a quick list of the type and number of living things that are found in each. When you are finished in the first pool, locate another further from the shoreline and continue until you have found five. Record your results in the table below.

| Rock Pool Number | Living things found |
|------------------|---------------------|
| 1                |                     |
| (closest to      |                     |
| shoreline)       |                     |
|                  |                     |
|                  |                     |
| 2                |                     |
|                  |                     |
|                  |                     |
|                  |                     |
|                  |                     |
| 3                |                     |
|                  |                     |
|                  |                     |
|                  |                     |
| 4                |                     |
|                  |                     |
|                  |                     |
|                  |                     |
|                  |                     |
| 5                |                     |
| (upper shore)    |                     |
|                  |                     |
|                  |                     |
|                  |                     |

#### Exercise 3: Birds & Mammals of the Rocky Shore

The rocky shoreline is an excellent place to see birds. Ireland has a hugely diverse population of seabirds. Spend ten minutes just looking for birds. There is a good chance you'll see at least six species.

You may not be able to identify all of the birds you see but try and determine how many species you see. You can also take notes of the birds' description and look this up later. Pay attention to <u>where</u> you see the birds. Are they to be found in any particular part of the shore?

Otters, foxes and even sometimes badgers are mammals that forage on the seashore. You might see tracks or droppings. Have a walk around your study area and see what you can find.

Record your findings below. Don't forget to add any findings to your map.

| Birds we saw or heard (describe |  |
|---------------------------------|--|
| if you can't identify them)     |  |
| , , , ,                         |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
| Mammal tracks or signs found    |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
|                                 |  |
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|                                 |  |

#### Exercise 1: Recording Sheet

Instructions: Very simply, starting nearest the shoreline, record the living things you find on the rocky shore. If a species such as bladder-wrack is found in your first quadrat, write its name in the left-hand column and then put a tick ( $\checkmark$ ) in the appropriate column.

Quadrat Number Species 

e.g. If we found that particular
seaweed in the first quadrat, our sheet would start like this:

| Species  | 1            | 2 |
|----------|--------------|---|
| Bladder- | $\checkmark$ |   |
| wrack    |              |   |
|          |              |   |
|          |              |   |
|          |              |   |