

Who owns the coast?

Teacher Notes


Sea kayaking is largely a coastal activity. Traversing the coastline and seeing the many and varied uses of it are at times fascinating and awe-inspiring, at other times, bewildering and distressing. Coastlines are in sharp focus like never before with the reality of climate change and sea level rise firmly in the public discourse. Compared to Australia and other developed nations, Papua New Guinea has a vastly different pattern of use and perception of coastline. This unit is designed to raise students awareness of coastal use conflict, how this might vary across cultures, and to cast our eyes to the future and decide how we might envisage our collective coastal future.

As individuals, communities and nations we have made mistakes, some by accident and many by design. We must all recognise the pivotal role that the coastline plays in our lives. Some live on the coast, others need it for their livelihood, many use it for recreation. With this varied use we inevitably create conflicts. To use the coastline as we do we have had to alter large sections of it, clearing land, diverting waterways, extracting resources and building structures. So whose coastline is it? What are the conflicts that have been created? How are they being resolved? What is the way forward for coastlines around the world? What's happening near you?

At the core of this unit is an excursion to a beach or coastline that is familiar to students. The nature of the area you choose for study will determine the direction that the rest of the unit takes. The activities on the excursion are many and varied. You probably won't have time to follow, with sufficient depth, all the threads that the excursion offers. The learning pathway presented in this unit is only one possibility. After the excursion and discussion around the mind maps (activity 1) you may think of a more effective way to reach the understanding goals, you may even want to re-write the understanding goals to better suit your class and their particular needs.

Who owns the coast?

Learning Sequence Title:	Who owns the coast?
Developed by:	Expeditionclass.com and Tasmanian Department of Education (Judy Travers)
Grade Level:	5 -8
Time Frame:	Time: Approximately 12 hours over 4 weeks
Generative Topic:	<p><i>What do I value about the coast, and how do I protect those values?</i></p> <p>The purpose of this unit is to make students aware of the diverse range of coastal environments; in particular beaches</p> <p>Throughout this learning sequence, students will gain a deeper understanding of the uses of the Australian coastline, the value it has to a range of people, animals and plants and the impact of various uses.</p>
Understandings Goals (UGs):	<p>Understandings Goals (UGs):</p> <p><i>UG1:</i> Students will understand that a variety of people, other animals and plants share the beach and each have impacts on the others.</p> <p><i>How do other people, animals and I use the beach?</i></p> <p><i>UG2:</i> Students will understand that we are all responsible for our effect on the beach and can make decisions that alter our impact in the future.</p> <p><i>What effects do I and others have on the beach?</i></p>
Concepts	Conflict resolution, interdependence, coastal sustainability, systems
Skills Focus	Debating and discussion skills, group work skills, presentation skills, artistic interpretation skills

UGs	Introductory Performances	Ongoing Assessment / Notes to Teachers
	<p>TUNING IN ACTIVITIES</p> <p>Activity 1: Beach Mind-map</p> <p>Inform students that this activity is a prelude to a beach excursion (nominate the beach in question). Students work individually with a large sheet of paper and coloured textas. In the middle of the paper students write '(name of the beach)'.</p> <p><i>Guiding questions</i></p> <p>'What is a beach?'</p> <ul style="list-style-type: none"> • List main characteristics • Definition • Components / structures • How they are formed <p>'Who uses the beach?'</p> <p>'What do you do at the beach?'</p> <p>How do others use the beach?</p> <p>'What do you think are some issues about the beach? '</p> <p>What animals use/ live on the beach?'</p> <p>Encourage students to use symbols and simple diagrams to illustrate their ideas. Refer to www.agoodmindmapsite.com for ideas on effective mindmapping. Discuss the mind-maps and then display them around the room for the duration of the unit. Refer to them often and invite students to add new elements to map.</p>	<p>▲ Teacher Notes ● Assessment</p>  <p>▲ This activity is designed to introduce the students to the unit and give information to the teacher regarding students level of initial understanding/ assess prior knowledge to adjust activities as needed.</p> <p>● Assess students' prior knowledge and depth of understanding. Adjust activities as required</p> <p>● Assess the extent to which each student:</p> <ul style="list-style-type: none"> • contributes ideas • demonstrates active listening skills • summarises points from interview • shares ideas with group.
	<p>SETTING THE SCENE</p> <p>Activity 2: Students prepare in groups a slide show of a maximum 12 slides, of digital photos that they have taken or have copyright permission to use, that summarises a range of uses of the beach: from the following perspectives:</p> <ul style="list-style-type: none"> • As a place of work • As a place of leisure • As a home • As a source of artistic inspiration • As a haven • As a place to lay eggs.....etc. 	<p>● Criteria for assessing work:</p> <ul style="list-style-type: none"> • clarity of ideas & message • photos & theme are well connected • overall presentation • working in a group.

	<p>Accompany the slides with music. Use a variety of websites to inspire</p> <p>http://www.cultureandrecreation.gov.au/articles/beach/</p> <p>http://amol.org.au/discovernet/tales/beach.asp</p>	
	<p>Activity 3: Undertake a webquest titled <i>Impacts on the Beach</i> and/or <i>What is Marine Debris?</i></p> <p>http://www.marine.usf.edu/beachbuddies/background.html</p>	<ul style="list-style-type: none"> ● Assessment rubric on poster and presentation that will indicate depth of understanding (see Appendix 1).
	<p>Guided Inquiry Performances (Finding out, sorting out, going further)</p>	<p>Ongoing Assessment / Notes to Teachers</p>
	<p>GUIDED INQUIRY</p> <p>Activity 4: Future thinking about beaches-excursion.</p> <p>Class assembles for briefing before leaving. Distribute and discuss worksheets titled <i>Beach Excursion</i> (Appendix 2). Discuss each activity in detail to ensure that students know exactly what is expected.</p> <p>Task 1: Timeline...’ undertake as a whole class with the teacher coordinating. Ask a student to draw a 10m line (estimate) in the sand. At one end write 1800AD and at the other write 2100AD. Ask students to divide the rest of the line up appropriately. Ask students to think about what the area might have changed along this timeline and stand on a point for some reason. Ask for volunteers to describe why they are standing in their time period. Students should record their position and reason on the excursion sheet.</p> <p>Task 2: Discuss the reasons and develop a class oral history of the beach. Record the retelling of the beach history. When back in the classroom, students to work individually on a ‘biography’ or ‘autobiography’ of the beach <u>OR</u> work in a small group to write up & illustrate the story as told in the oral history task.</p> <p>Task 3: Have students work in pairs to be ‘ecological detectives’ & look for the items in Task 2 Appendix 2.</p>	<ul style="list-style-type: none"> ▲ The excursion offers many opportunities for assessment. Due to the beach setting, it presents a chance to talk to students informally. ● Assess individual’s contribution to the oral history in terms of a rating 1-5 against: <ul style="list-style-type: none"> • Clarity of reason • Quality of rationale • Depth of scientific accuracy. ● Assess the thoughtfulness, originality and fluency of the responses. ● Assess the ‘Beach Biography’ using the Rubric in Appendix 6.

Back in the Classroom - Graffiti Boards

In small groups students rotate around graffiti boards and add ideas from the beach excursion. Graffiti boards will be headed by teacher and mirror the dot points from aforementioned activity (eg. Something you can't count...). Students are encouraged to make connections between ideas and add new ones as they occur. 8 posters in total, students in groups of 2-4. Give students 2-5 minutes to add their idea. Students will need to have their excursion sheet to refer to. Post graffiti sheets around the room. When you have a spare 15-30 minutes focus on one sheet and discuss the students' contributions informally.



Activity 5: Beaches as an inspiration for the arts

Students will represent change over time at the beach under study by completing a three panel postcard in pencil or other medium. The panels will each be .5 of A4 paper and upon completion the three pictures will be framed and displayed. A short description of the differences between the pictures will be required to support their understanding of change over time.

Before students begin they need to have their ideas for the differences written down and approved by the teacher.

- Write ideas on paper for teacher (past, present, future)
- Complete the three separate pictures
- Write a list of the similarities and differences between the pictures
- Frame it

Draw up a class negotiated checklist so students can self-check their work. If time let students go to desk and work on ideas list for past, present, future.



By the late 19th century the beach had become a common subject in Australian painting. Tom Roberts' *Slumbering Sea, Mentone* and Charles Conder's *Sketch of Littlehampton Beach* were

- Self assessment of work using a teacher / student developed rubric



- ▲ Literature & Media is used with older students.

among the earliest depictions of beach life in Australia.

Since then the beach has periodically returned as a subject for Australian artists in images such as Max Dupain's famous [Sunbaker](#) and [Bondi](#) as well as in the work of contemporary artists such as Anne Zahalka's [The Bathers](#) and [Cole Classic](#).

Some Australian writers have become closely associated with the beach. Tim Winton's novels often feature the West Australian coast, e.g. [Dirt Music](#). Robert Drewe's [The Drowner](#), [Bodysurfers](#) and [Book of the Beach](#) form an extended examination of the beach in the Australian psyche.

The dream of making a 'seachange' from city to seaside was explored in the popular ABC TV drama series [Seachange](#).

Surfing culture is the backdrop to Gabrielle Carey and Kathy Lette's novel [Puberty Blues](#) and the classic teen film of the same name, and to the 1970's thriller [Summer City](#) and 1990's drama [Blackrock](#).

Task 1: Students are to undertake an independent review into a painting, book or appropriately rated movie/TV series related to beaches. Select from the following or own choice negotiated with the teacher.

- [Slumbering Sea, Mentone, Tom Roberts](#)
- [Sketch of Littlehampton Beach, Charles Condor](#)
- [Sunbaker, Max Dupain](#)
- [Bondi, Max Dupain](#)
- [The Bathers, Anne Zahalka](#)
- [Cole Classic, Anne Zahalka](#)
- [Dirt Music, Tim Winton](#)
- [The Drowner, Robert Drewe](#)
- [Seachange](#)
- [Puberty Blues, Gabrielle Carey and Kathy Lette](#)
- [Blackrock](#)

● Criteria for the Review include:

- the extent to which the student can communicate ideas clearly
- clarity of the students' own thinking about the item.

Activity 6: Beach-user interest groups.

Students compile a list of beach users from Activity 1. Choose 4-6 key user groups, each

▲ As chair of the meeting the teacher will be taking notes of the discussion. These, and the completed worksheet, would form the basis

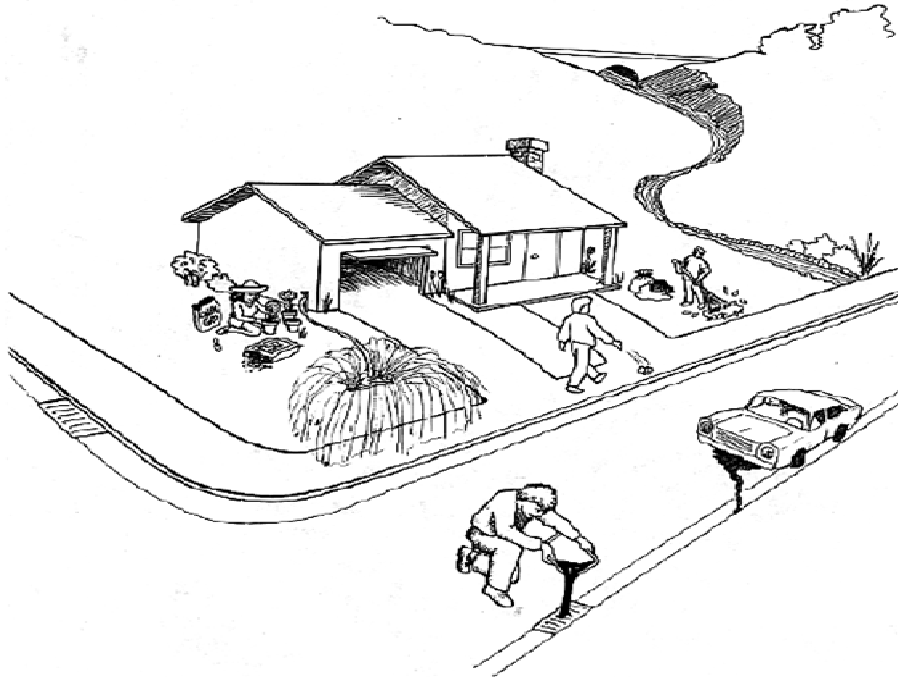
<p>group represents one interest group. Hand out 'User Profile' worksheet for each group to answer. This worksheet gives the students a chance to think deeply about their 'user' eg. Fisherman, penguin, surfer, dog, dog owner, holiday maker, nearby resident etc. Questions to be considered include how often, when, why, what impact, who are you in conflict with? After 10-15 minutes the groups are asked to formulate questions to ask another group. For example, to the fisherman from the penguins, is it fair that you take the fish that we need to eat to survive? Teacher needs to act as chairperson for the proceedings to run smoothly. There should be adequate opportunity for rebuttal and follow-up questions.</p>	<p>of the assessment for this activity.</p> <ul style="list-style-type: none"> ● Criteria for 'User Profile Worksheet include: <ul style="list-style-type: none"> • display of effective communication skills to increase understanding • contribution of ideas • quality of interview questions.
<p>Activity 7: Designing a Travel Brochure</p> <p>Each student will use Microsoft Publisher to develop a travel brochure about the beach from the perspective of a one specific user eg. dog, tourist, local resident, grass, shell etc. for the actual brochure. Students will add illustrations and text. The students are to pretend they are working for a travel agency so they want to make the beach seem as appealing as possible. They want to convince the fellow users that a trip to the beach will be the holiday of their dreams; therefore their brochures should be pleasant to look at and should highlight the values of the beach to that user. The students should label their pictures and include brief descriptions and information about the beach. The teacher should have some examples of travel brochures so the students can get some ideas.</p>	<ul style="list-style-type: none"> ● Students will present their brochure to the rest of the class. This is an opportunity for the students once again to demonstrate their knowledge of the beach from the specific perspective. This activity will be used as a means of assessment for most of the unit. ● Criteria for assessment will be: <ul style="list-style-type: none"> • Depth of understanding of different perspectives and cause and effect • Quality of written work to convey messages • Quality of presentation
<p>CULMINATING PERFORMANCE</p>	<p>Ongoing Assessment / Notes to Teachers</p>
<p>Activity 8: Through the eyes of... Drama on the beach.</p> <p>This activity continues the unit themes by asking students to write a narrative describing a beach-user conflict and then performing the narrative as role-play. By now, students will have a bank of their own ideas relating to possible user conflicts but this is a chance to extend this further. Students will be asked to base their narrative on a scenario described by Andrew Hughes in his weekly correspondences. This will require students to read back through newsletters and blog entries to identify such conflicts and expand on them creatively. For his part, Andrew will be</p>	<ul style="list-style-type: none"> ▲ Students are either given a pre-prepared rubric (see Appendix 5) to assess their peers performances or the whole class can sit down to work one out. It would require twice the time, at least, if the rubric was to be constructed from scratch, but it would be a valuable learning experience. Either way, the expectations from the performance need to be explicitly stated. After each performance the assessing student would explain their ratings and provide a positive critique.

<p>actively observing real conflicts (some more obvious than others), and recording them. For example, he might make reference to incidents with swimmers, surfers, native animals, no camping areas or polluted water. Students will have to hunt back for these references and choose one to elaborate on.</p>	
<p>Writing a Role Play from Real-life Conflict</p> <p>Task 1: Students will have to review correspondence with Andrew Hughes (newsletters, emails, web updates) to identify examples of real-life conflicts. Students will write a short scenario revolving around one selected conflict. There is no dialogue, just a description (400-500 words) of an incident that demonstrates conflict and resolution (or lack of resolution). Creativity should be encouraged. Students will then read their narrative to a classmate who has to dramatise it physically but non-verbally in a role play.</p> <p>The extension of this activity will have the students designing a rubric to self-assess their performance.</p> <p>Learning Steps:</p> <ol style="list-style-type: none"> 1. Divide correspondence between groups to analyse. 2. Collate the student's findings at the conclusion and record them with the class on a large displayable poster. 3. Students choose a scenario and write a role play at least one page long. Remind students of sentence structure, checking, picture words AND that they are writing for a performance. 4. When most of the class has finished (2 sessions) have a whole class session devising a rubric for assessment of the forthcoming performance. 5. Students work in small groups performing and assessing each other using several scripts. 6. Report back to class and discuss final assessments as a group. <p>If you think your class would benefit from more background work in role play you could use the role play outlined in Appendix 4.</p>	<ul style="list-style-type: none"> ● Self assessment using a student designed rubric.

	Conclusion of Unit	Self Evaluation Rubric
Self	Ask students to complete the self-evaluation rubric based on what they achieved.	<ul style="list-style-type: none">● Students will:<ul style="list-style-type: none">• Reflect on what they have achieved/their performance• Submit the rubric to the teacher for final assesment.

[Introduction](#) | [Task](#) | [Process](#) | [Evaluation](#) | [Conclusion](#) |

1.1 Introduction



Welcome to the Newman home. The Newman's are a typical Australian family that lives in a typical suburb of Hobart. Just like any other family on the block, weekends at the Newman's house is bustling with activity.

Here is a snapshot of a typical Sunday at the Newman home:

Mr. Newman wants to change the motor oil of his prized 1968 Nova. When he is done, he doesn't know where to put the used oil. So, he disposes of it by pouring it down the storm drain. Mrs. Newman is planting a flower garden. She prides herself in having the prettiest petunias on the block. She gives her flower beds a generous dose of miracle grow and copious amounts of pesticides to keep those terrible pests off her flowers. She feels that she has no time for weeding so she decides to spray the flower beds with Roundup. Mr. Newman is inspired by his wife's gardening and decides to mow, fertilize and water his front lawn after lunch. Little Billy Newman takes *Bluey*, their puppy, for a short walk. *Bluey* poops on the lawn of their neighbours.

Billy's older brother, Todd, who is a pizza delivery boy, notices that his car is leaking coolant. He decides he will fix it next week and zooms off in his car to play ultimate Frisbee with his buddies at the park around the corner. As he drives off he drops a plastic bottle in the gutter, together with some old fishing line that he has had in the car for ages.

Katy Newman is picking up around the house. She throws all the garbage, including cans, plastic bags, water bottles and newspapers in the garbage can. But not all of it fits, so she places the extra garbage in a bag which she puts next to the garbage can, hoping the garbage man will pick it up. As she plops down the garbage, she covers a sign above the storm drain that says

"No dumping please, I live downstream"

There is a picture of a beautiful dolphin beside it.

Later that week the Newman's saw the following pictures in their local newspaper:



Study the activities of the Newman's.

Is it possible that the Newman's Sunday activities have an effect?

On the beautiful dolphin, the seal and the beach?

In what ways can they be affecting the beach and the overall ocean environment? Be prepared to share your findings with other environmental sleuths such as yourself.

1.2 Task

The task should have three stages:

1. Use your inquisitive nature, as a scientific investigator, to research & determine how everyday human activity has a direct impact upon the ocean environment. What are some implications of this interrelationship?
2. Share your findings with other investigators at a scientific summit and reach a group consensus.
3. Compile your findings that demonstrate the interrelationship between man and ocean systems. Present your findings at mock town hall meeting consisting of concerned citizens, business owners, and environmentalists. Create a poster or semantic map (that could potentially be posted in your neighbourhood or community) showing everyday human impact on our oceans. Finally, present the group with a recommendation on how to alleviate this avoidable negative impact.

1.3 Process

1. Define the problem/issue. It should be socially significant and interesting to the students.

2. You will become an environmental investigator to determine what human activities directly affect the beaches and oceans. You will study the Newman household, and their Sunday activities. Use scientific inquiry to find direct cause and effect. Compile your information into a case folder of which you can bring to the scientific summit. You may use the links below (along with others you may find during your investigation) as leads in the investigation:
 - <http://www.oceanconservancy.org/site/PageServer?pagename=home>
 - <http://www.surfridersd.org/kids4cleanH2O.php>
 - <http://www.lajollalight.com/2004/03/04/n040304rains.html>
 - <http://www.surfridersd.org/ecofacts.php>
 - <http://www.surfridersd.org/funstuff.php>
 - http://library.thinkquest.org/CR0215471/ocean_pollution.htm
 - <http://oceanlink.island.net/oceanmatters/oil%20pollution.html>
 - <http://oceanlink.island.net/oceanmatters/marine%20pollution.html>
 - <http://oceanlink.island.net/ask/pollution.html>
3. As an investigator, you will compile a case study folder of your findings. You will bring this folder with you to the scientific summit to share with other environmental sleuths. Together, as a group, you will put together a cohesive conclusion of the cause and effect relationships of human activity and beach / ocean pollution. You will create a poster or map (using the inspiration program) that displays this relationship.
4. You bring your conclusions and awareness poster to the school community meeting. You will use the evidence you have accumulated during your investigation to inform the concerned attendees of options and recommendations the community can employ to reverse any negative impact on beach / ocean systems. Students present individual positions to the group with appropriate evidence.

1.4 Evaluation

Below is a rubric to determine your assessment. You will be assessed on your individual performance on gathering research information.

You will also be evaluated on how you work with others at the meeting.

Your persuasiveness and ability to present information and provide recommendations at the meeting will be scored.

You will also be graded on the quality of your awareness poster or inspiration map.

1.5 Conclusion

As you can see, the things you and your family do everyday have a positive or negative effect on the natural environment around you. You have learned that the consequences affect not only humans, but fragile marine life as well. With awareness and a few simple changes in our behaviour we can make a tremendous impact for the better concerning our environment.

The Newman's are just one family. Imagine if everyone on the Newman's block had the same bad habits. Conversely, what if the entire block, or better yet, an entire community had the correct environmentally responsible habits, what impact would that make? What can you do to help others in your community to recognize and change what they do to keep our oceans clean? What organizations exist to help us become aware about our social responsibility to the environment and other organisms we share this earth with? What are some other things that you can do to preserve other natural ecosystems? Continue to be warriors for the environment, advocates of awareness, and stewards of our future!!!!!!!

Evaluation Rubric: Impacts on the Beaches

Category	Beginning 1	Developing 2	Accomplished 3	Exemplary 4	Score
Research & Gather Information	Does not collect any information that relates to the topic.	Collects very little information--some relates to the topic.	Collects some basic information--most relates to the topic.	Collects a great deal of information--all relates to the topic.	
Collaborative effort at meeting	Always relies on others to do the work.	Rarely does the assigned work--often needs reminding.	Usually does the assigned work--rarely needs reminding.	Always does the assigned work without having to be reminded.	
Role at meeting	Does not answer any of the questions pertaining to the role at the meeting.	Answers some of the questions pertaining to the role at the meeting.	Answers most of the questions pertaining to the role at the meeting.	Answers all of the questions pertaining to the role at the meeting.	
Presentation of human impact on ocean environment	Does not detail problems caused by human impact and offers no recommendations.	Details some problems caused by human impact but offer no recommendations.	Details many of the problems caused by human impact and offer some recommendations.	Details many of the problems caused by human impact and offer many recommendations .	
Awareness Poster or Map	Presents no explanation of research.	Presents an explanation of research but tends to be confusing or unclear.	Presents a logical explanation of research and some possible solutions.	Presents a superior explanation of research and offers many possible solutions.	

Appendix 2

Beach Excursion

Name:

Date:

Task 1: Timeline on the beach.

Where did you stand on the timeline?

Why?

Task 2: Be an ecological detective, look for (but don't collect);

- A living thing that is growing.

- Something that was once alive.

- Something that has changed.

- Something that is impossible to count.

- Something you can't photograph.

- A natural thing that could be used as a tool.

- Something that shouldn't be there.

- Something that won't be here in 100 years.

- Something.....

▪ Something.....

▪ Something.....

Task 3: Beach poetry.

Sit quietly by yourself. Look at the beach scene around you and write a cinquain poem of five lines- no rhyming is needed! Focus on what it is that you value about the beach.

1. The first line is one word as a title.
2. The second line has two words describing the title.
3. The third line has three words expressing an action.
4. The fourth line has four words telling about your feelings on this subject.
5. The fifth line has one word to sum up.

1.

2.

3.

4.

5.

Type your poem & share it with others on a bulletin board. Leave space underneath for other students to write what value/s they think you are describing in your poem.

Task 4: Observing nature as art.

Sit quietly and observe the beach scene. Sketch and write examples of the features in the boxes below.

A shadow	A shape	A curve
(your choice)	A line	A pattern

Task 5: Sit quietly for a few minutes and listen.

- ▲ Write down all the noises you can hear and where they come from on a separate sheet of paper. If you don't know what the noise comes from just describe the sound.

Appendix 3

Beach User Survey

1. Name: _____ Age: _____

2. How often do you go to (the beach under study)?

Once a day..... Once a week..... Once a month..... Once a year.....

3. What do you do at (the beach)?

4. Which other animals or people use (the beach)?

5. Is there anything you should not be allowed to do at (the beach)? Describe.

Appendix 4

A (user A's) Opinion About (the beach)

Name:

Age:

1. How often do you go to (the beach)?

Once a day..... Once a week..... Once a month..... Once a year.....

2. What do you do at (the beach)?

3. Describe how you get along with (user B). Are there any problems?

4. Describe how you get along with (user C). Any problems?

5. Describe how you get along with (user D). Any problems?

A (user B's) Opinion About (the beach)

Name:

Age:

1. How often do you go to (the beach)?

Once a day..... Once a week..... Once a month..... Once a year.....

2. What do you do at (the beach)?

3. Describe how you get along with (user A). Are there any problems?

4. Describe how you get along with (user C). Any problems?

5. Describe how you get along with (user D). Any problems?

Appendix 5

Role Play Warm-up Through the eyes of.....

This activity is a role playing game that will help students understand the impact of litter and pollutants on the sea birds and marine animals. Common items such as plastic bags, bottle tops and cigarette butts, can be mistaken by coastal birds and animals for fish, jellyfish or seaweed. For many of these animals this mistake can be fatal. These creatures can also become entangled in plastics and other litter when feeding, resting or just moving around their coastal environment.

This activity requires students to work in pairs, one is the narrator and one is the coastal or marine animal. The role playing helps the students identify with the animal and allows them to be creative in developing a narrative and actions. In the case of younger groups, the teacher may wish to narrate for the class.

1.1 Where to do it

This activity can be conducted at the beach, or simply in the classroom.

If it is possible to visit the beach, the students should walk along the beach looking at the litter and picking it up for disposal, if appropriate facilities exist. Litter samples from the beach could be collected for use in the role plays.

If it is not possible to visit the beach, examples of the litter found along beaches can be collected from the playground or be brought into the classroom and used in the role plays. You might find it fun to play some 'coastal sounds' audio while the activity is taking place.

1.1.1 SAMPLE NARRATIVE

To be read out aloud by the 'narrator', while the 'animal' - in this case a Diving Petrel - acts out the story.

1.1.2 The diving petrel and the plastic bag.

You are a sea bird soaring high in the sky above a sparkling ocean way below. The sun is out and the breeze is cool fresh and salty. Gusts of wind toss you around. Sometimes you float with the wind and let it carry you towards the shore and sometimes to push back against it.

You swoop downwards and zoom in towards the shore. Looking way down below, you can see the waves breaking on the sandy beach. You have been playing in the wind for ages and it has been hours since you last had something to eat.

You skim along only metres above the water behind the breaking waves looking for a school of fish that will make a nice lunch. You dart back and forth looking for a glimmer of silver below the surface. Just the thought of that juicy fish makes you even hungrier.

There doesn't seem to be any fish about. You turn and head for the shore. Perhaps you'll just have to have a meal of boring sand hoppers instead.

Just as you begin to head for the shore, a glint of silver on the surface of the ocean below catches your eye. You swoop down towards the ocean. All you can think about is munching on that juicy fish. You hit the surface of the water right on target but it is not a fish that you have caught.....you resurface, not with the big juicy fish that you had been daydreaming about, but a shiny piece of plastic caught tightly

around your neck. It is the ring from around the top of a bottle. You twist and turn to try and break free from the plastic but the more you twist the tighter it becomes around your throat.

You are scared. You continue to flutter and flap your wings but nothing seems to help. You try and try for hours and hours. As night falls you collapse to the ground exhausted and hungry, unable to search for food and unable to defend yourself against foxes and cats that come out to hunt for birds at night. (this needs referencing)

1.1.3 Class discussion at the end of the role play

What could we do to stop these problems occurring?

Some ways to address litter problems that are killing our sea creatures:

- be more responsible with their litter;
- always dispose of rubbish, cigarette butts, plastic bags etc properly;
- encourage better designed bins where rubbish can't fly out;
- always cut plastic bottle rings;
- always tie knots in plastic bags in case they do blow out of bins and into the sea.

Some litter also arrives on the beach via drains that lead to the sea. In this case someone has dropped the rubbish somewhere else in the town and it has been washed down the drains to the beach.

Some more questions to think about ...

- Which items are most dangerous to wildlife?
- What are the most common types of litter?
- What types of litter, found at the beach, would not be found in the school ground?

Appendix 6

Narrative/Role Play Rubric

CATEGORY	4	3	2	1	SCORE
Problem/ Conflict	It is very easy for the reader to understand the problem the main characters face and why it is a problem.	It is fairly easy for the reader to understand the problem the main characters face and why it is a problem.	It is fairly easy for the reader to understand the problem the main characters face but it is not clear why it is a problem.	It is not clear what problem the main characters face.	
Creativity	The narrative contains many creative details and/or descriptions that contribute to the reader's enjoyment. The author has really used his imagination.	The narrative contains a few creative details and/or descriptions that contribute to the reader's enjoyment. The author has used his imagination.	The narrative contains a few creative details and/or descriptions, but they distract from the story. The author has tried to use his imagination.	There is little evidence of creativity in the narrative. The author does not seem to have used much imagination.	
Action	Several action verbs (active voice) are used to describe what is happening in the narrative. The narrative seems exciting!	Several action verbs are used to describe what is happening in the narrative, but the word choice doesn't make the narrative as exciting as it could be.	A variety of verbs (passive voice) are used and describe the action accurately but not in a very exciting way, nor captures the essence of the message to be delivered.	Little variety seen in the verbs that are used. The narrative seems a little boring.	
Setting	Many vivid, descriptive words are used to tell when and where the narrative took place and its context within the purpose of this study.	Some vivid, descriptive words are used to tell the audience when and where the narrative took place.	The reader can figure out when and where the narrative took place, but the author didn't supply much detail.	The reader has trouble figuring out when and where the narrative took place.	