



another activity from the
Telecom Education Foundation

Sea Keepers

protecting our nature

How to Take Part in Sea Keepers for Schools

- In 1995, hundreds of New Zealand schools took part in an information technology adventure - Expedition Icebound. This year the Telecom Education Foundation activity is Sea Keepers for schools.
- Sea Keepers are people who are dedicated to the exploration, study and conservation of water including exploring the underwater world and rescuing injured sea mammals.
- Taking part in Sea Keepers for Schools allows your students to use an exciting range of information technology, help fulfil the objectives of the Technology Curriculum and to explore the natural world.
- Using
 - fax
 - audioconference
 - E-Mail
 - the Internet
- your pupils will have access to fascinating and detailed information on a range of water and environmental topics.
- Sea Keepers is not only about the sea, but also about lakes, and wetlands and the use of water throughout our waterworld.

Join in the adventure today by contacting Telecom's Sealine Fax.

Join today and receive your free starter pack on Seakeepers for Schools.
Simply fax your name, school and address to:

Telecom's Sealine Fax (04) 498 5575

Supplementary Classroom Activities for Sea Keepers for Schools

Identified Science & Language Strands

- Living World - levels 1- 4
- Written, Oral and Visual Language
- Links : Art • Health and Wellbeing • Maths

Valuing our water environment

Middle/Senior School Impressions we've gained

- Pupils discuss and identify on maps the beaches/streams/lakes they have visited throughout New Zealand?
- Have pupils jot down short words and phrases that come to mind about their visit to these/this beach stream or lake, eg
 - purpose of their visit
 - time of the year and weather
 - most striking features
 - colours and sounds
 - feelings, memories, impressions
 - birds and animals . . .

- Share these with the class.

Art & Craft

- Make these impressions and memories the subject of a painting
 - or have students paint the perfect beach/lake/river . . .
 - or search through brochures and magazines to find beach/water pictures and create a co-operative group collage.

Importance of Environment

- Establish the closest beach, lake and/or water environment to the school.
- Why is it important to the local area? Pupils list all the reasons.

- Debate and list the reasons in order of importance. This may take considerable discussion before the order is established.
- Challenge groups to come up with a visual representation of their reasons in order of importance for the water environment in your area. eg

We have fun there

It is a place of beauty that humans need

It brings in tourists and money to the area

It provides a home for fish, birds and animals

- Have groups present their visuals to the class including explanations of why they rated them this way.
- Follow this up with class debate.
- All pupils now write individual statements as to why their local water environment is important.

for Schools

al world together



Junior School Activities

Finding Out, Thinking & Sharing

- Play the game: When I go to the beach/river/lake I see . . . ? Point to a child and if no response the child drops out. Who is last? This will provide you with an extensive list to write on a chart or mobile.
- Discuss list of "I see's . . ." and have children think of ways they can classify what they see *eg* things that are living, birds, fish . . .
- Each pupil draws a picture of their favourite things. Add captions and read to the class.

Lets Really Go and See

- Arrange for a field trip to your nearest beach or waterway.
- Revisit your 'See's' list and if possible have pupils find pictures of birds, plants and animals that they might see on the visit.
- Upon arriving, sit quietly and have pupils explore the beach/waterway with their eyes and ears.
- Go on a discovery walk along the beach directing the pupils to look at various features *eg* seagulls soaring, seaweed, drift wood, rock pools, rocks, plant life . . .
- Take rubbings of interesting stones and driftwood.
- Ask the children to find and count things that shouldn't be on the beach (litter).
- How would they have got there?
- Back in the classroom list and categorise all the beach discoveries.

- Have pupils draw the different plants and animals that they found.
- Complete a beach mural and include sounds, sights and stories from the beach trip. Include beach rubbings on the mural.
- Have pupils find their discoveries in books and magazines.
- Discuss and list all possible ways that the debris got there.
- How can we help the beach? Brainstorm with the children.
- It is important that the children are made to know that they can make a difference.
- Decide on a plan of action, *eg*
 - an education campaign of posters
 - a class letter of short wise statements to a local community newspaper
 - talking on a radio station
 - have pupils enlist the help of parents and other senior classes to clean up the beach.
- After the clean-up:
 - make constructions or collages out of the clean litter
 - classify it into different areas *eg* colour, weight, size . . .
 - draw litter graphs and pictograms.
- Adopt your beach/ waterway and revisit it often to check on its condition and note the changes that occur during the year and from season to season.
- Keep a running wall chart record of new discoveries and encourage your pupils to be able to recognise and name plants, animals, shellfish, seaweed small fish, birds . . . Enjoy!



- Up and running on line are the Telecom NZ World Wide Web '96 Tutorial Series
- The series is part of the Telecom Education Foundation's teacher tutorial series being held at 20 sites throughout the country from April to November. At these tutorials, teachers will be guided through the basics of the WWW with a hands-on approach.
- All schools have received enrolment forms and we highly commend it to you.
- Contact details for teachers to enrol for the tutorials are:
Phone: 0800 223 040
Fax: 0800 228 090
- The World Wide Web (WWW) has been demystified and the tutorials take you through easy stages showing just how accessible this Internet tool is. Even a new users page, advanced users page and glossary of Internet terms is included.

Check out these sites!

- [http:// www.hmu.auckland.ac.nz:8001/monz/seaweeding/intro.html](http://www.hmu.auckland.ac.nz:8001/monz/seaweeding/intro.html)
- A fun site to find out all the weird and wonderful facts about Seaweed. This site is a joint partnership between the Museum of NZ and Telecom Education Foundation established for Sea Keepers for Schools. (S1-F2)
[http:// gene@seawifs.gsfc.nasa.gov](http://gene@seawifs.gsfc.nasa.gov)
- This Nasa government site provides a wealth of information and classroom activities about the sea. Very useful for your Sea Keepers Project. (S4-F2plus)

Telecom
NEW ZEALAND

another activity from
the Telecom Education Foundation

Sea Keepers

protecting our

Dolphins & Whales



Supplementary Classroom Activities for Sea Keepers Term Four Themes

Research Project - middle/senior school

Whales & Dolphins are not fish

- Whales & Dolphins share the same environment as fish but there are important differences between them. Have your students research and answer the following:
- List the differences and similarities between whales, dolphins and fish
- How do they breathe?
- How do they swim?
- How are their young born?
- Describe their outer skins.
- Where do they live?
- How do they eat?

Make a Documentary - junior/middle

- Pupils discuss and list all known facts about dolphins and whales.
- Have each pupil choose one fact from the list to illustrate and caption.
- Introduce the idea that each group can make their own 'TV movie' to share with other classes.
- Join all the pictures together on a roll.
- Wrap this around a dowel and put this in a cardboard box to make the TV screen.
- Don't forget a title page and leave room at the bottom for the picture titles.

Just the Facts

Making Facts Practical

- Pupils assemble facts from their research on dolphins and whales and present as a list.
- Discuss now they could present these facts in interesting ways to share with other classes and parents, *eg*
 - scale drawings of whales and dolphins or actual size cutout shapes
 - the combined weight of ... children at the school = one blue whale
 - mime how dolphins can herd fish into shallow water for eating.

Dolphin and Whale Maths

Make Your Own Problems

- During the pupils' research on whales and dolphins they will come across many fascinating facts. Show them how to turn these facts into interesting maths word problems to challenge each other, *eg*
 - a dusky dolphin can swim at 40 kph. How far could it swim in 3 hours, 5 hours ...
 - a whale swims at about 10 kph. How long will it take to swim from Antarctica to Kaikoura?
 - a newborn baby blue whale weighs two tonnes. If it gained five kilograms per hour how long would it take to weigh three tonnes?

Fabulous Fishy Sites

- The photographs on this page have been downloaded from the Internet and this is just a sample of what is available. A good place to start is the Telecom Education Foundation Home page which has links to many sites throughout the world.
- Below we identify some of the wonderful Internet sites on a 'Fishy' theme for your pupils to explore and learn from.

Telecom Education Foundation

<http://www.tef.telecom.co.nz>

The Marine Mammal Page

<http://www.phoenix.net/mark/>
Simply everything you want to know about marine mammals. It includes beautiful images.

Whale Times

<http://www.whaletimes.org/>
Perfect for children's research. They can find out all about their favourite sea creatures. Designed for kids!

David's Dolphin Images

<http://www.presair.com/usr/dhoffmann>
Just wonderful pictures of dolphins and whales.

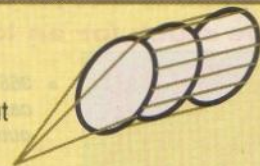
Catacean Pictures

<http://elpc54136lboro.ac.uk/pictures>
A photo gallery of fish and mammals taken by a professional photographer.

Art & Craft

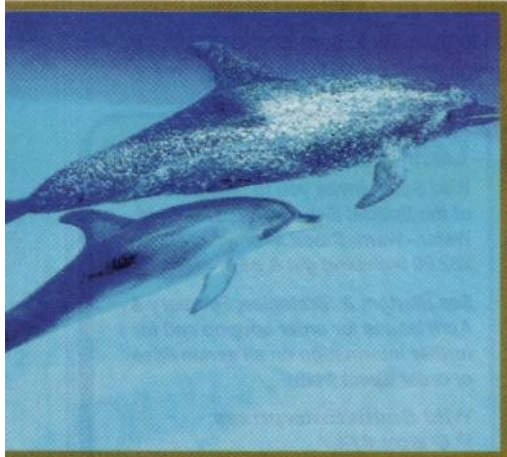
Build a Whale

- Discuss and plan out how big you want your whale to be.
- Build the frame by joining plastic or cane hoops together with bamboo or dowel.
- Cover the frame with light chicken wire.
- Mix up a solution of wallpaper paste.
- Pupils make the skin of the whale using papier maché strips dipped in the paste and laid on the basic frame to make the shape.
- When completely dry, sketch out areas with chalk and then paint the whale.



rs for Schools

natural world together



On-Line



XTRA is Telecom's On-line Service. As a special offer, XTRA is offering schools free connection and 10 free hours on-line time to be used in the first month.

- Software is provided free of charge (Both PC and MacOS)
- XTRA is a really good way of using your Telecom Learning Line to bring data and information from all over the world into your classroom.

(<http://www.xtra.co.nz>)

Audio Conferences for Students

Water and Beach Safety with Alexandra Paul

- Wednesday 30 October, 11.30 am, Alexandra Paul, Baywatch Television Star.

In her private life, Alexandra is very interested in conservation issues and problems related to overpopulation.

Alexandra will be covering water and beach safety issues during the conference and obviously she will field questions about Baywatch!

Boating Safety with Leslie Egnot

- Wednesday 6 November, 11.30 am, Leslie Egnot, New Zealand Olympic Yachtswoman.

Leslie is one of New Zealand's greatest sailors and is widely known as the captain of the all women crew of Mighty Mary that sailed in the 1995 America's Cup Defence finals.

Not only does Leslie love sailing but she enjoys teaching others about the special skills and teamwork needed to be safe and professional at sea. She will cover these aspects during the conference.

Take part in these exciting AudioConferences

- Even if you are not enrolled in Sea Keepers for Schools you are invited to take part in these exciting AudioConferences.
- To take part and for further details please contact:

Sarah Berry

Sea Keepers for Schools Co-ordinator

Toll Free Phone: 0800 433 822

Stop Press

- Look out for *Adventurers & Explorers*, the exciting new Telecom Education Foundation theme for 1997.
- Look for the preview in the November issue of *Starters & Strategies!*

Telecom
NEW ZEALAND