

## Handout sheets for upper primary classes

This set of four handout sheets provides resources to teachers for four lessons that can be developed to introduce and discuss the problems of marine debris and ghost nets in particular, with your upper primary school students.

### Suggestions for use

1. Have the students work in small groups or pairs.
2. Take turns to read the story on the front page of the handout together.
3. Circle any words that they are unsure of the meanings. Discuss possible meanings together. Have them look at the context and see if they can work out what each word means.
4. Have students confirm their predictions using a dictionary or the internet.
5. Read the key story together again.
6. Discuss any things in the text of interest to the students.
7. In pairs, have the students take turns to ask each other questions that can be answered from the text. See if they can stump their partner.
8. Read the questions on the back page of the handouts. Discuss what students now already know about these things.

9. Read the fact sections on the back page. Does this add or clarify any key points relating to the questions listed?
10. In pairs, have the students discuss the listed questions and craft written answers. Discuss the best answers as a class.
11. Choose one of the further activities and do them as a class or in small groups.
12. If students have not accessed any of the websites of interest that are listed on the handout sheets, encourage them to do so in their personal study time or at home. There is also a list of sites on the back of this sheet for further research.

### Other activities

- Discuss any common word patterns the authors have used. For example entrapped, entangled, endangered. Are there other words students know that they can add to this group (e.g. enmeshed)? When should you use entangled rather than tangled, entrapped, rather than trapped? Have students use the words correctly in sentences (orally).
- Break the students into small groups and ask them to discuss the devices the authors used to get their point across? How have they structured their writing so that the reader will be convinced of their argument?
- Take one of the sections from the facts part on the back page and change the information text into a text of a different genre that communicates the same key points.
- Examine the beginnings and endings of the four key texts. Which one has the best sizzling start and the best ending? Why? Choose one of the four texts and rewrite the ending so that it has a more powerful punch.
- Examine the overall design and text choices the authors have made in these handout sheets. What extra devices have they used to get their points across? Think about one of your completed science reports. How could you restructure your report to increase the impact of the facts you are presenting? What devices that the authors have used could you employ in your report writing?



## Web Resources

### Marine Debris

<http://www.tangaroablue.org/resources/education-kit.html>

### Ocean Gyres

<http://www.adrift.org.au>

<http://education.nationalgeographic.com/education/encyclopedia/ocean-gyre/>

<http://www.theoceancleanup.com/www.5gyres.org>

### Ecosystem Services

<http://biodiversity.europa.eu/topics/ecosystem-services>

### Plastic

<http://plasticpollutioncoalition.org/>

<http://www.lifewithoutplastic.com>

### Biodiversity

<http://treeday.planetark.org/documents/doc-378-earth-alive-2012.pdf>

### Food chains and food webs

[http://www.sciencebob.com/questions/q-food\\_chain\\_web.php](http://www.sciencebob.com/questions/q-food_chain_web.php)

<http://www.primaryhomeworkhelp.co.uk/foodchains.htm>

<http://sciencelearn.org.nz/Contexts/Life-in-the-Sea/Science-Ideas-and-Concepts/Marine-food-webs>

### Food security

[www.foodsecuritynews.com/What-is-food-security.htm](http://www.foodsecuritynews.com/What-is-food-security.htm)

<http://www.globaleducation.edu.au/>

### Caring for country

<http://www.curriculumsupport.education.nsw.gov.au/primary/hsie/assets/pdf/caring/caringplace.pdf>

<http://www.environment.gov.au/indigenous/>

<http://www.environment.gov.au/indigenous/workingoncountry/>

### Healthy country, healthy people

<https://www.mja.com.au/journal/2009/190/10/>

healthy-country-healthy-people-relationship-between-indigenous-health-status-and

### Indigenous protected areas

<http://www.australiangeographic.com.au/topics/history-culture/2014/06/indigenous-protected-areas>

<http://www.environment.gov.au/indigenous/ipa/>

[http://en.wikipedia.org/wiki/Indigenous\\_Protected\\_Area](http://en.wikipedia.org/wiki/Indigenous_Protected_Area)

### Ranger programs

<http://www.nlc.org.au/articles/info/ranger-programs1/>

<http://www.tsra.gov.au/the-tsra/programs-and-output/env-mgt-program/land-and-sea-ranger-program>

<http://www.ehp.qld.gov.au/ecosystems/community-role/ranger/>

<http://www.klc.org.au/land-sea/kimberley-ranger-network>

These websites belong to other organisations and therefore content and links may change with time. GNA cannot accept responsibility for any loss or damage arising from their use.

## About Ghostnets Australia

GhostNets Australia (GNA) was established in 2004, as an alliance of Indigenous communities in north Australia to deal with a growing ghost net issue. It continues to operate in these key areas:

### Ranger Support and Training

Since 2004 GNA has resourced and trained indigenous coastal rangers to manage the ghost net issue over 3,000 km of coastline. By 2014, rangers (now independent), had removed over 14,000 ghost nets and rescued almost 300 entangled turtles.

### Data Collection and Analysis

Rangers also record important information about the ghost nets which is uploaded to the GNA database for analysis. This information has helped GNA to determine the abundance and distribution of the ghost nets so that on-ground management of the issue is more focused.

### Research

In partnership with CSIRO, GNA's research has answered the important questions of 'where from?'; 'why are these nets lost, abandoned or discarded?', and most importantly 'who is responsible?'. With these questions answered work can start on finding solutions to the problem.

### Awareness

GNA promotes awareness of the ghost net issue through workshops, forums and other public events, including the successful Ghost Net Art Project.

### Ghost Net Art Project

The Ghost Net Art Project, (now independent), was a GNA initiative. Community members reuse ghost nets to create beautiful art, which can be found in galleries and museums, and more recently on a stamp! This new art genre is being used to spread the word about ghost nets.

### The Future

Having ensured that ongoing management of the issue at a local level continues, GNA is now working with fishers, international governments and communities on ways to reduce the problem of ghost nets on a global scale.

