



Analysing Human Impacts on the Marine Environment

YEAR 7 AND 9
BIOLOGICAL SCIENCES



QGC

FUTUREMAKERS



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Future Makers

Future Makers is an innovative partnership between Queensland Museum Network and Shell's QGC business aiming to increase awareness and understanding of the value of science, technology, engineering and maths (STEM) education and skills in Queensland.

This partnership aims to engage and inspire people with the wonder of science, and increase the participation and performance of students in STEM-related subjects and careers — creating a highly capable workforce for the future.

Cover Image: Blue-blubber Jellyfish, Catostylus mosaicus. QM, Gary Cranitch.

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EVALUATE

Analysing Human Impacts on the Marine Environment

Teacher Resource

Students investigate the effect of human activity on the marine ecosystem in more detail. Topics could include the effect of litter, deforestation, sea level rise, tourism, climate change or ocean acidification.

Students choose a topic and then analyse the impact of the human activity on individual organisms and the whole ecosystem. They then discuss what is being done to minimise the impact on the ecosystem, and what more could be done. It can be valuable to pass the placemats around so that all groups can contribute to building a comprehensive summary. Groups can then share their results with the class.

Curriculum Links

Science

YEAR 5

Science as a Human Endeavour

Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083)

YEAR 6

Science as a Human Endeavour

Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE100)

YEAR 7

Science Understanding

Interactions between organisms, including the effects of human activities can be represented by food chains and food webs (ACSSU112)

Science as a Human Endeavour

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120)

People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE121)

YEAR 8

Science as a Human Endeavour

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE135)

People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE136)

YEAR 9

Science Understanding

Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems (ACSSU176)

Science as a Human Endeavour

People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities (ACSHE160)

Values and needs of contemporary society can influence the focus of scientific research (ACSHE228)

General Capabilities

Literacy

Composing texts through speaking, writing and creating

Critical and Creative Thinking

Inquiring: Identifying, exploring and organising information and ideas

Generating ideas, possibilities and actions

Reflecting on thinking and processes

Analysing, synthesising and evaluating reasoning and procedures

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Student Activity

