**Classroom Activity – What are Marine Reserves,
and how to they protect habitats and species?
(Gr 4 – 10)**

Overview: In this lesson students learn about Tasmania's diverse and unique marine ecosystems, the problems they face, and the role of national marine reserves. Web searching in small groups is required to answer a range of key questions about a specific marine reserve or marine conservation area, with information learned to be compiled into a poster.

TASK 1: As an introduction to marine reserves and marine conservation areas ask the whole class a range of questions to highlight their current understanding, and identify knowledge gaps to direct web investigations.

- What kinds of unique marine organisms are found in Tasmania?
- What are the major marine habitats in Tasmania?
- What are some of the problems faced by these habitats?
- How many protected marine areas do we have?
- What social and economic value do marine reserves provide?
- What are 'Fisheries research areas'?

TASK 2: After being introduced to marine reserves arrange students in small groups and assign each group a marine reserves and marine conservation areas (from the list provided). Perform a web search to answer a range of questions in their own words. Ask each group to create a poster of their assigned marine reserve to highlight its specific value, what it protects, how it protects it, and why. Groups can present their posters to the class, or display them around the classroom for viewing by other groups.

Tasmanian marine conservation reserves
See: http://www.parks.tas.gov.au/index.aspx?base=397
http://www.dpipwe.tas.gov.au/inter.nsf/WebPages/KMEE-63B3R6?open

Blackman Rivulet Marine Conservation Area
Central Channel Marine Conservation Area
Cloudy Bay Marine Conservation Area
Derwent Marine Conservation Area
Governor Island Marine Nature Reserve
Hippolyte Rocks Marine Conservation Area
Huon Estuary Marine Conservation Area
Kent Group Marine Nature Reserve
Maria Island Marine Nature Reserve
Monk Bay Marine Conservation Area
Ninepin Point Marine Nature Reserve
Opossum Bay Marine Conservation Area
Port Cygnet Marine Conservation Area
Port Davey Marine Nature Reserve
Robert's Point Marine Conservation Area

Simpsons Point Marine Conservation Area
Sloping Island Marine Conservation Area
South Arm Marine Conservation Area
Tinderbox Marine Nature Reserve
Waterfall – Fortescue Marine Conservation Area

Consider these questions as you explore the web:
- What is the name of the marine sanctuary?
- Where is it located?
- What kinds of habitats are found there?
- What are the key species found there?
- How do these species interact with one another?
- What are some of its more unique features?
- What role do humans play in this environment?
- What are some of the major issues or problems faced in protecting this resource?
- How are the resources being protected?
- What kind of research is conducted there, or on the key species or habitat elsewhere?
- How will you know if a reserve has been effective?

TASK 3: After students have seen the posters prepared by their classmates, ask them to answer these questions about Tasmania's marine reserves:
- Which marine sanctuary is most like the one that you presented?
- Which one is most different?
- Name several things that each of the marine sanctuaries have in common.
- Write a sentence describing the relationship of humans to marine environments.
- How would you describe the overall mission of the Marine Reserves Program?
- What do you think might happen to the marine environment if it was not protected by reserves?
- What are some other ways to achieve similar protection?

TASK 4: Investigate marine protected areas and marine sanctuaries in other parts of the world, and discover what they protect. Are marine reserves been effective on their own in protecting species and habitats? What other management measures are required to conserve marine ecosystems?
> See: http://www.environment.gov.au/coasts/mpa/index.html
> http://sanctuaries.noaa.gov/visit/welcome.html