




Our Vision:

Hauraki Gulf Forum members work together to support community shellfish monitoring efforts that contribute towards an improved understanding of the state of intertidal shellfish resources and biodiversity in the Hauraki Gulf Marine Park.

The Hauraki Gulf Forum Community Shellfish Monitoring Programme

-  Brings the members in the Hauraki Gulf Forum together with community groups, schools and iwi to monitor inter-tidal shellfish on sandy beaches
-  Supports community groups to collect scientifically robust information about shellfish populations and changes in them over time
-  Teaches people about the marine life that lives on our beaches and how it is affected by human activities

Annual surveys are carried out to count and measure the dominant kinds of shellfish, such as cockles and pipi, living in sheltered beaches, harbours and estuaries. This is done with the help of experienced coordinators and the backing of scientists.

Groups develop an understanding of the coastal marine environment, learn about shellfish population dynamics, scientific monitoring, and how human activities affect natural systems.



Join the programme

To find out more about setting up a shellfish monitoring programme at a local beach see the website www.haurakigulfforum.org.nz or contact your council.

Auckland Council
Ph (09) 301 0101
Waikato Regional Council
Ph 0800 80 04 01

The Hauraki Gulf Forum is a statutory body charged with the promotion and facilitation of integrated management and the protection and enhancement of the Hauraki Gulf.

The Forum has representation on behalf of the ministers of Conservation, Fisheries and Maori Affairs, elected representatives from Auckland Council (including the Great Barrier and Waiheke local boards), Waikato Regional Council, and the Waikato, Hauraki, Thames Coromandel and Matamata Piako district councils, plus six representatives of the tangata whenua of the Hauraki Gulf and its islands.

COMMUNITY SHELLFISH MONITORING IN THE HAURAKI GULF MARINE PARK



Cover image (c) Broker Brothers



Photo courtesy of Janet Hunt

Why monitor shellfish?





Cockles (tuangi) and pipi are important cultural and recreational harvest species. The ability to harvest shellfish from beaches within the Hauraki Gulf is one of the values people hold dear. Some shellfish populations are under threat due to over-harvesting and changes to the environment that may be caused by human activities, such as development and pollution.

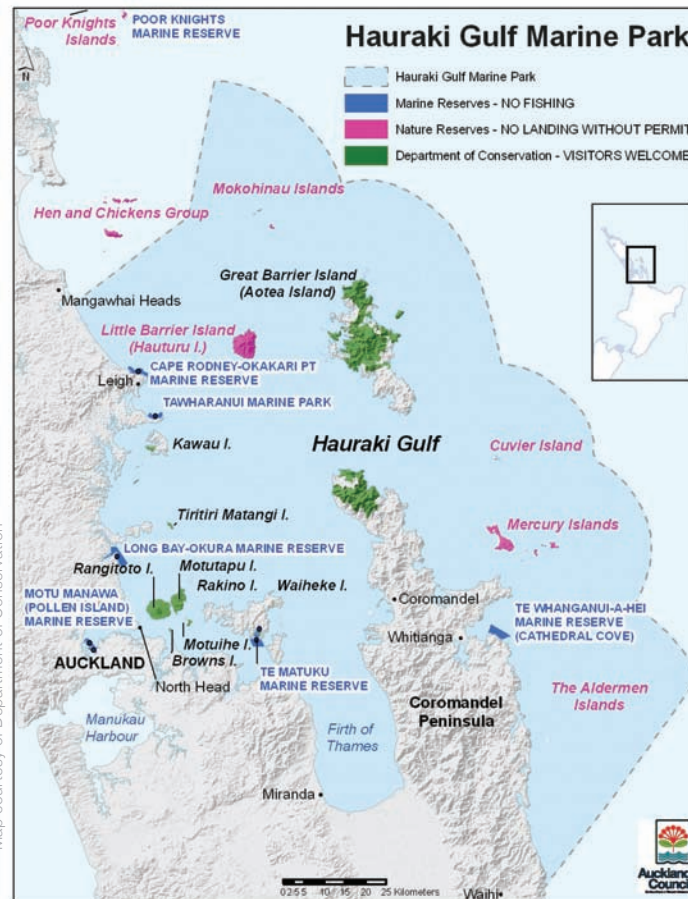
Shellfish can be good indicators of environmental health. Filter feeders such as cockles and pipi are sensitive to contaminants in their environment such as sediment and chemical pollutants. The health of the environment affects shellfish growth rates and reproductive ability, so monitoring changes to their size and abundance gives us a biological indicator for environmental health.

A well-designed monitoring programme provides the essential data that can be used to compare shellfish populations over time and help communities, local and regional councils, conservation and fisheries managers make informed decisions about how to look after the shellfish and their environment.



Monitoring groups supported by the programme are provided with

-  **Surveying equipment** including quadrats, sieves and shellfish measuring devices
-  **Coordinator support.** Provides training in basic skills and practical assistance to design, coordinate and undertake annual shellfish surveys
-  **Teacher resource kit.** Provides schools with information and activities linked to the intermediate and secondary curriculum to add value to the learning opportunities provided by the field survey
-  **A database** for entering survey data so findings are securely recorded for future comparisons and accessible to other partners in the programme.



Map courtesy of Department of Conservation

How is the shellfish survey done?

A coordinator will assist in the design of a beach sampling grid.

The shellfish are sampled in the same places each year using a quadrat and mesh sieve. Marine life is counted and the dominant shellfish (eg cockles and/or pipi) are measured.

What happens to the survey data?

Survey data is entered into a database. Participating groups have the opportunity to carry out their own analysis of the survey data. The teacher resource kit includes guidelines for creating graphs that show the number, size and distribution of shellfish found.

Monitoring information is also analysed by scientists and changes are tracked from year to year. The trends are reported annually to the Hauraki Gulf Forum and a copy of the report is sent to all participating groups. Every three years the information contributes to the State of the Hauraki Gulf Environment Report.

What happens if shellfish are declining?

The number of shellfish in a population naturally fluctuates over time. Several years of survey data are needed before trends can be reliably detected.

If the results of several annual surveys indicate that the shellfish populations are declining, management responses will be considered.

