



Healthy Harbour, Healthy Future

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GHHP win 2016 'Spirit of EcoFest' Award

GHHP attended Gladstone's EcoFest on 5 June alongside members from GHHP's citizen science project, Creek Watch. The stall featured the 3D model of Gladstone Harbour, a play area for children with sea creatures and playdough, Winnie—the paper mache turtle, and water and insect samples taken on the Creek Watch program. GHHP was honoured to be awarded the Spirit of EcoFest Award. GHHP's presence at EcoFest was a great way to get in touch with the community, with many attendees stopping by to ask questions and chat to members of GHHP's Science and Communications teams. Throughout the day 180 report cards were handed out, while 90 'Gladstone Harbour: Barry and Jenny's Expedition' storybooks were distributed.



Gladstone
Healthy Harbour
Partnership

REPORTING ON THE HEALTH OF GLADSTONE HARBOUR

Environment

Water & sediment quality
Habitats
Fish & crabs

Social

Harbour access
Liveability/wellbeing
Harbour usability

Cultural

Sense of place
Cultural heritage

Economic

Economic values
Economic stimulus
Economic performance

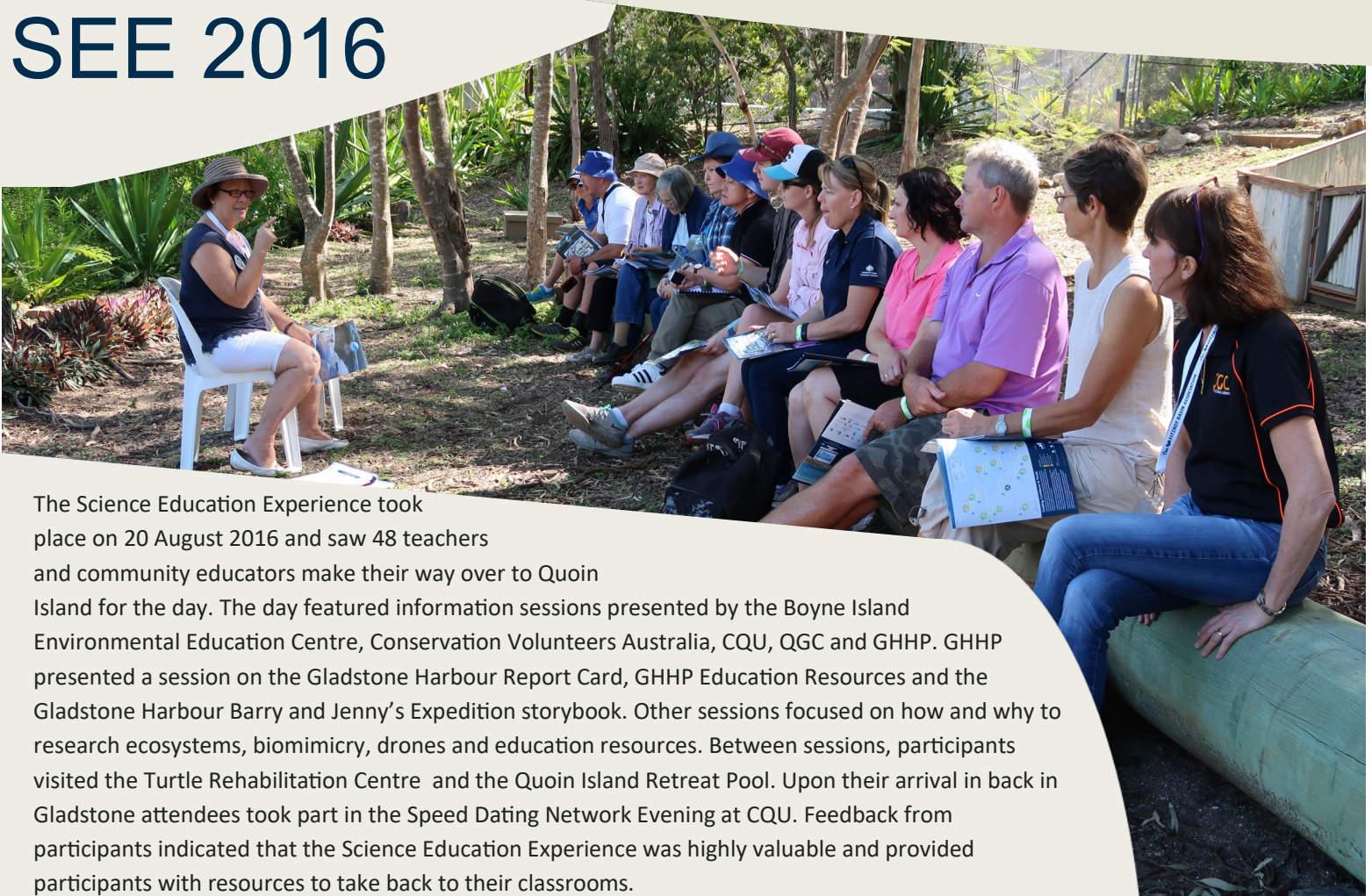
Healthy Harbour, Healthy Future

GHHP INTRODUCES NEW ISP CHAIR

GHHP are excited to announce the appointment of our new Independent Science Panel Chair, John Rolfe. John is a resource economist who has specialised in the use of choice modelling and other non-market valuation techniques. He is Professor in the Faculty of Arts, Business, Informatics and Education and a member of the Centre for Environmental Management at the Central Queensland University. John has a number of research interests, including regional development, environmental, resource and agricultural economic issues, resource trade-offs, and economic impact assessment in regional areas.



SCIENCE EDUCATION EXPERIENCE SEE 2016



The Science Education Experience took place on 20 August 2016 and saw 48 teachers and community educators make their way over to Quoin Island for the day. The day featured information sessions presented by the Boyne Island Environmental Education Centre, Conservation Volunteers Australia, CQU, QGC and GHHP. GHHP presented a session on the Gladstone Harbour Report Card, GHHP Education Resources and the Gladstone Harbour Barry and Jenny's Expedition storybook. Other sessions focused on how and why to research ecosystems, biomimicry, drones and education resources. Between sessions, participants visited the Turtle Rehabilitation Centre and the Quoin Island Retreat Pool. Upon their arrival in back in Gladstone attendees took part in the Speed Dating Network Evening at CQU. Feedback from participants indicated that the Science Education Experience was highly valuable and provided participants with resources to take back to their classrooms.

GHHP CONDUCTS CORAL CORING PROJECT

Coral reef communities within Gladstone Harbour and the report card zones may be impacted by natural processes including floods, storms and biological interactions as well as historical and current human activity, including land use within the catchment area and port-related activities. The skeletons of long-lived massive corals provide records of annually dated growth and environmental conditions that can extend existing observational records of the marine environment in which the corals grew.

The Gladstone Healthy Harbour Partnership (GHHP) in conjunction with the Australian Institute of Marine Science (AIMS) is currently conducting a coral coring study in Gladstone Harbour to examine pre-industrial conditions of the harbour and document any changes over time. This study will be conducted in two stages. The first stage commencing in October 2016 will involve surveys to identify suitable coral colonies within the Gladstone Harbour region. These colonies will need to be approximately 0.75 to 1.00m in height to obtain records that cover the pre-industrial history of the harbour dating back to the 1970's and earlier.

The second phase of this project will involve re-visiting selected sites and taking coral cores. The core holes will be plugged to avoid any permanent damage to the coral and promote the living tissue to overgrow the hole. Laboratory analysis of the cores will be conducted to reconstruct continuous records of sediment inputs, the presence of any heavy metals and nutrient inputs. An assessment of coral growth rates comparing pre and post-industrial development levels and levels within and outside the harbour area will also be made.

The project will use the coral core records to describe the influence of human and natural pressures over time on the health of Gladstone Harbour. If sufficient coral suitable for coring is found in the October Surveys a report detailing the project findings will be made available to GHHP in late 2017.

At the completion of the study the coral cores will be archived at the AIMS Coral Core Archive and will be available for further analysis in the future.

Representative images of dominant macroalgae genus at monitoring locations:



a) Sargassum at Facing Island



b) Asparagopsis at Rat Farmers Reef



c) Mixture of Sargassum and Lobophora at Seal Rocks North



d) Mixture of Dictyota and Colpomenia at Rat Island

FUNDING FROM \$5,000 - \$20,000 AVAILABLE

WHAT IS THE CITIZEN SCIENCE FUNDING PROGRAM?

The GHHP Citizen Science Funding Program is a funding program aimed at involving the community in the science of monitoring and reporting on Gladstone waterways.

Proposals are sought by GHHP for projects that can be conducted within the Gladstone Harbour catchment that not only investigate our waterways but encourage people of all ages to get involved. These projects can range from \$5,000 - \$20,000.

The project needs to be a hands-on, inquiry-based waterway science program that stimulates science inquiry, capturing the imagination of participants.

WHO CAN APPLY?

- Local community groups
- Local schools or school groups
- Local not-for-profit organisations

WHO IS GHHP?

The Gladstone Healthy Harbour Partnerships (GHHP) monitors and reports on the health of the Gladstone harbour annually developing the Gladstone Harbour Report Card. GHHP has 26 partner organisations that represent government, industry, research and community groups. All partner organisations have demonstrated their long-term commitment to achieving the Partnership's vision that 'Gladstone has a healthy, working, accessible harbour'.

THINK:
INTERACTIVE,
CREATIVE,
EDUCATIONAL
+ FUN!



FOR MORE INFORMATION PLEASE CONTACT:

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Gladstone Healthy
Harbour Partnership

CALLING FOR COMMUNITY GROUPS, SCHOOL GROUPS + NOT-FOR-PROFIT ORGANISATIONS

GHHP Partners



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