

ROCKFISH NEWS



ABOUT THIS PUBLICATION

This publication is part of a larger project, "Quillback Rockfish Conservation in Strait of Georgia RCAS: Education and Outreach in the Gulf Islands", being led by the Galiano Conservancy Association and Valdes Island Conservancy. Funding by Habitat Stewardship Program, in cooperation with Department of Fisheries and Oceans.

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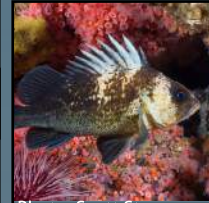


Photo: Scott Stevenson

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Photo: Darienne Lancaster

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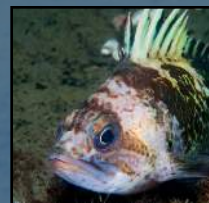


Photo: Scott Stevenson

RESPECTFUL
FISHING AND
BOATING

ROCKFISH IN THE STRAIT OF GEORGIA

UNDER PRESSURE

Recreational fishing in the Southern Strait places immense pressure on rockfish species. Major population declines have been seen in the last few decades alone, and 8 species are listed as 'threatened' or of 'special concern' by COSEWIC in Canada.

HIGH RISK, SLOW TO RECOVER

Rockfish are a very long lived species and mature after 6-12 years, producing more eggs as they get older, which means their populations rebuild and recover slowly. The oldest recorded was 205 years old! The older fish are more critical to population resilience, making it very important for us to provide protected areas for them to mature and reproduce.

5 inshore species of Rockfish found in the Strait of Georgia inner waters:

- ▶ Quillback (*Sebastes maliger*) (COSEWIC: Threatened)
- ▶ Copper (*Sebastes caurinus*)
- ▶ China (*Sebastes nebulosis*)
- ▶ Tiger (*Sebastes nigrocinctus*)
- ▶ Yelloweye (*Sebastes ruberrimus*) (COSEWIC and Species at Risk Act: Special Concern)

For Quillback Rockfish, the Strait of Georgia population has declined over 75% in one 22-year generation (Yamanaka *et al.*, 2004; Marliave and Challenger, 2009).



Photo: Scott Stevenson

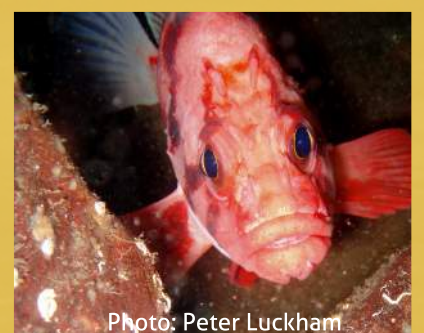
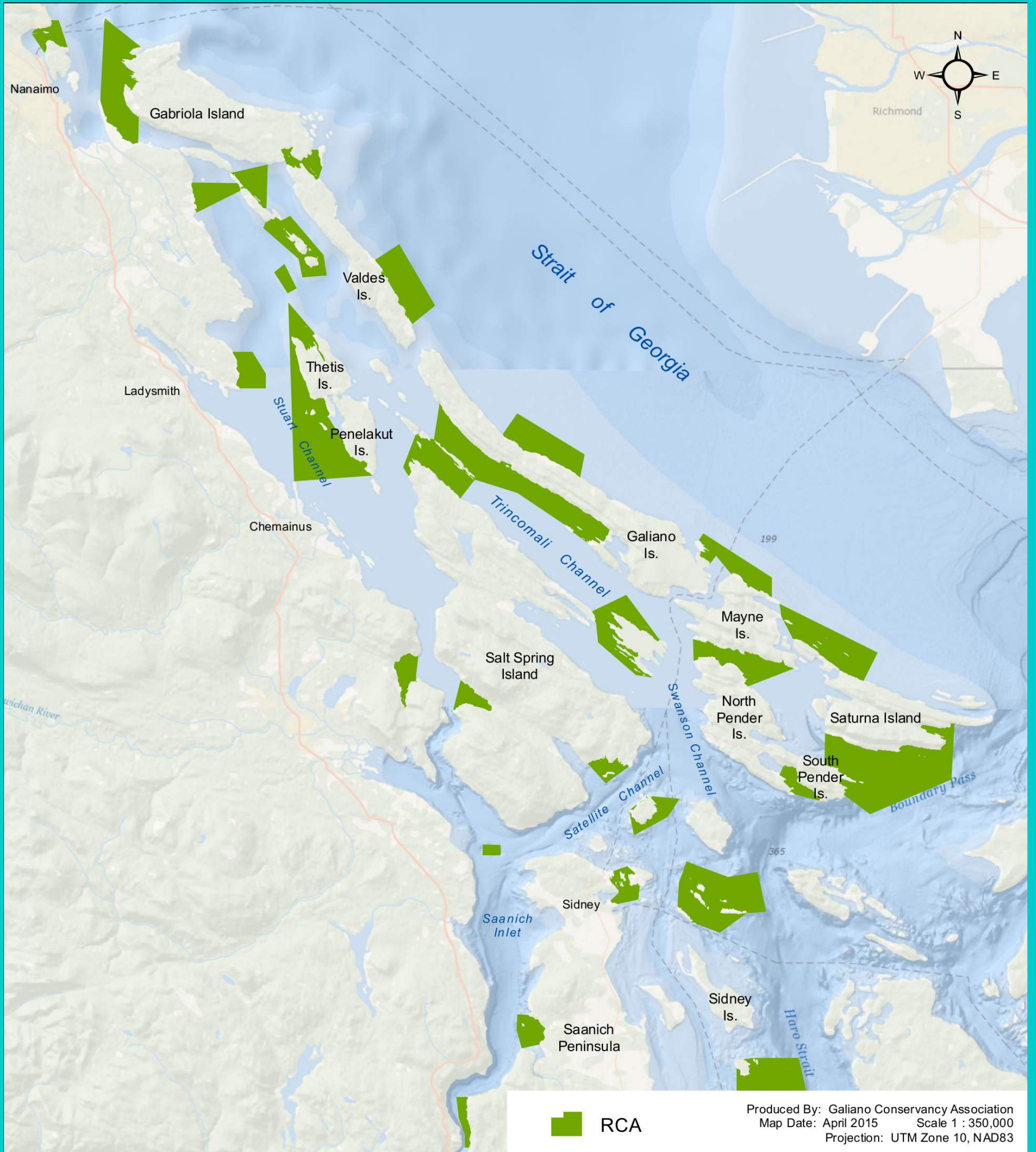


Photo: Peter Luckham



ROCKFISH CONSERVATION AREAS IN THE SOUTHERN STRAIT OF GEORGIA

DO YOU KNOW IF YOUR FAVOURITE FISHING OR ANCHORING SPOT IS IN AN RCA?

Beginning in 2002, Department of Fisheries and Oceans implemented Rockfish Conservation Areas (RCAs) along the BC coast as a response to greatly reduced abundances of inshore rockfish species. There are 164 RCAs in total. **No hook and line fishing** is permitted in these areas. Aboriginal right to fish is not infringed upon.

Do your part to help our ecosystems rebuild, and limit your recreational fishing activities to the following within RCA boundaries:

- ▶ invertebrates by hand picking or dive
- ▶ crab, shrimp or prawn by trap
- ▶ smelt by gillnet

Commercial Fishing - Allowed Activities in RCAs:

- ▶ invertebrates by hand picking or dive
- ▶ crab or prawn by trap
- ▶ scallops by trawl
- ▶ salmon by seine or gillnet
- ▶ herring by gillnet, seine, and spawn-on-kelp
- ▶ sardine by gillnet, seine and trap
- ▶ smelt by gillnet
- ▶ euphausiid (krill) or groundfish by mid-water trawl
- ▶ opal quid by seine

NATIONAL MARINE CONSERVATION AREA IN THE STRAIT OF GEORGIA

SNAPSHOT OF THE CURRENT CONTEXT

The marine life off BC's coast is among the most diverse in the world, and the unique habitats and biodiversity in the Strait of Georgia are well represented in the Salish Sea. Pressure from fishing, shipping and recreational use have had a significant impact and concerns continue to rise over the unsustainable and imbalanced dynamics in the area. The need for official protection has been recognized by federal and provincial governments since 2003. Preliminary planning and feasibility studies by Parks Canada began in 2004 to establish marine protection in the Southern Strait of Georgia. If successful, this process will result in a Parks Canada recommendation to the federal government for inclusion of the area into the National Marine Conservation Areas Act. The proposed boundary is 1,400 square kilometers, encompassing the Southern Gulf Islands, from Cordova Bay in Victoria north to Gabriola Pass. This area includes sites of very intensive use, adding complication to planning for protection and selective exclusion of use. Prioritizing the long-term health and vibrancy of this area for generations to come can be a guide in finding a respectful balance between the needs of our regional community and our incredible marine ecosystems.

Source: Parks Canada Backgrounder Oct. 14 2011

REGIONAL CONSERVATION EFFORTS AND RESEARCH

DFO AND UBC EVALUATE FISH DENSITIES IN AND OUT OF RCAS

In a joint DFO-UBC project, Lynne Yamanaka (DFO), Dana Haggarty and Dr. Jon Shurin (UBC) collected data on reef fish densities inside and outside of RCAs using a Remotely Operated Vehicle (ROV). They surveyed 34 RCAs between 2009 and 2011, including 7 RCAs in the Southern Gulf Islands. Although there was no evidence of overall greater densities of rockfish, lingcod or kelp greenling in RCAs, there is a trend for slightly higher fish densities in the Prevost Island RCA and the more recent surveys completed in the Trincomali Channel-Saltspring Island North and Valdes Island East RCAs.



Photo: Janine Becket

VANCOUVER AQUARIUM ANNUAL ROCKFISH ABUNDANCE SURVEYS

If you SCUBA dive with a video camera and capture video of rockfish then it's easy for you to participate in our Rockfish Abundance Survey, which runs annually from August to October. Through this diver survey we collect data that can help us determine how many rockfish there are, where they live and how this information might change over time. Participating in this survey can be as easy as just sending us your dive videos, we will identify and count the rockfish for you. Or, if you are good at identifying the fish yourself you can fill out the survey sheet.



Photo: Natalie Ban

<http://www.vanaqua.org/act/research/fish/rockfish-survey>

Guess what? This shows only a selection of the exciting work being done in our region for rockfish conservation. Please refer to the organization list on the back page for additional information.

CONSERVATION EFFORTS ON THE ISLANDS

CITIZEN SCIENCE AND PUBLIC AWARENESS IN YOUR COMMUNITY

Galiano Conservancy Association promotes marine conservation through environmental education programming and research. Part of the Southern Strait of Georgia Marine Conservation Network, the Conservancy has focused recent research efforts on rockfish, with the Freedom to Swim Rockfish Recovery Project in 2010-2011 surveying rockfish populations around Galiano and providing outreach to support the RCAs' recovery from overfishing.

Valdes Island Conservancy, since its inception in 2007, has striven to protect the waters off of Lyackson/Valdes Island and educate visitors and residents about Rockfish Conservation Areas. Efforts include direct outreach and informative materials in newsletters and online on their website to raise awareness about respectful fishing practices, and enforcement of no-fishing areas with shoreline markers in Region 29.

AWARENESS AND FISHING COMPLIANCE

RESEARCH AT THE UNIVERSITY OF VICTORIA

Darienne Lancaster, a Masters Candidate in the School of Environmental Studies at the University of Victoria, has been following up on a study by Dana Haggarty from UBC that showed recreational compliance in RCAs was low. Darienne investigated levels of recreational fisher compliance in Strait of Georgia RCAs, with fieldwork in summer 2014. She interviewed 325 recreational fishers and posted trail cameras in 40 locations around the islands to monitor activities in RCAs. She is currently finalizing her research. Here's what she's found so far:

Recreation Fishing Community Strongly Supports the Concept

- ▶ **wide support** for marine protected areas and fisheries closures as tools for marine conservation

Lack of compliance greatly impacts effectiveness of these areas

- ▶ **65%** of RCA locations monitored with cameras showed recreational fishing efforts

Awareness of RCAs very low among recreation fishers

- ▶ nearly **60%** are unsure of where RCA boundaries are
- ▶ **25%** have never heard of RCAs

RESPECTFUL, SUSTAINABLE MARINE STEWARDSHIP IS A COMMUNITY RESPONSIBILITY

TURN THE TIDES: BE A MARINE STEWARD

It's easy to make some meaningful improvement in our marine conservation efforts here in the Gulf Islands.

FISHING AND BOATING PRACTICES

- ▶ **Know where the RCAs are, and what activities are allowed there.** Fishing outside their boundaries, or by allowed methods within their boundaries, helps replenish populations for the whole area.
- ▶ **Avoid fishing in rocky reef areas to reduce by-catch.**
- ▶ **Avoid anchoring or dumping boat waste** in rocky reef areas or eel grass meadows.
- ▶ **Watch for signage at water access** and fishing areas and marinas.
- ▶ Rockfish are very susceptible to **barotrauma**; catch and release usually results in the fish not surviving.
- ▶ Support the implementation of a **National Marine Conservation Area (NMCA)** for the Southern Strait of Georgia.



Photo: Scott Stevenson

WAYS TO GET INVOLVED

- ▶ **Go diving!** Join community dive surveys with REEF or the Vancouver Aquarium; learn about scientific diving with Rockfish Divers
- ▶ **Knowledge is Power!** Find out more about rockfish and spread the word about RCAs; learn fish and invertebrate identification on REEF's online Fishinars; fishing closures in your area; research that is being done; sustainable fisheries and how rockfish fit into the food industry; and tips for fishermen to avoid killing unwanted rockfish
- ▶ **Stand up for your ocean!** Inform others and report violations to DFO at 1-800-465-4336



Photo: Darienne Lancaster

"NATURE IS NOT A PLACE TO VISIT. IT IS HOME." - GARY SNYDER

FOR MORE INFORMATION ON REGIONAL ROCKFISH CONSERVATION AND RESEARCH EFFORTS:

