MAJOR HAZARDS of the GULF ISLANDS

Courtesy of



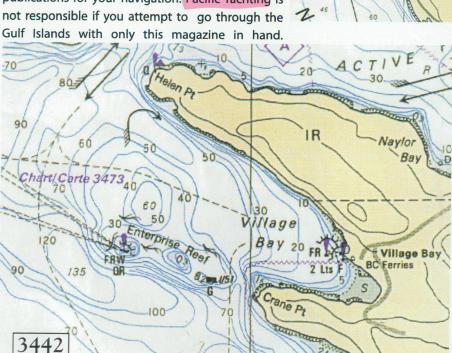
YACHT CHARTERS & SAILING SCHOOL

THE GULF ISLANDS **MAJOR HAZARDS**

For some good and some not-so-good reasons, we hit the same rocks over and over again.

Barrie Jackson identifies the rocks with the biggest boat-eating appetites... (re-printed with permission from Pacific Yachting, January 1995)

Running aground can be expensive. expensive enough for a couple of our local charter companies to compare notes about groundings. The findings are startling. Almost all of their accidents occurred repeatedly at one of 9 places in the Gulf Island. The most notorious "keel-biting" rocks lurk in the waters around Enterprise Reef, Porlier Pass, Clam Bay, Danger Reefs, Pylades Island, Ruxton Pass, Pirates Cove, Rogers Reef, SilvaBay (approach and entrance) and Gabriola Reefs. In most cases, the navigational errors were identical. Most accidents occurred at or near low tide, the skipper was "cutting the corner" rather than navigating mid-channel, and was not on deck at the time of the accident. Here are the locations, dangers, navigation aids, and cautionary note for each site. Bear in mind that the cautions are merely admonishments - you must use current charts and publications for your navigation. Pacific Yachting is 7 not responsible if you attempt to go through the





Porlier Pass 48°00.0N 123°35.0W

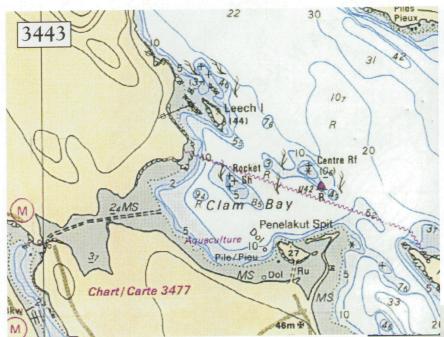
The pass between Galiano and Valdes Islands. Black Rock has rocks extending out from it, and a submerged wreck lies near Virago Rock. Currents up to 9kts can be experienced mid-channel. Large vessels and tugs with barges frequent Porlier Pass. Black Rock is marked by a starboard-hand day-beacon at the northwest end. Virago Rock Sector Light, a white tower with black band, is situated on a rock northwest of the wreck. Caution: Stay in the middle of the channel between Race Point and Virago Rocks Light, parallel to the range line, until clear of buoy U45, or in Pylades Channel to the west. Transit only at the turn of the tide (slack water). Consult the Canadian Tide and Current Tables. Do not impede large vessels navigating in the pass



Enterprise Reef 48°50.7'N 123°20.8'W

A drying reef in the southeast approach to Village Bay and Active Pass. Enterprise Reef Light, a white circular tower with a red top band, marks the west end. A green buoy, U51, defines the east end. Caution: Do not pass between the light and buoy. Stay west of the light when passing Enterprise Reef. If you have to look up at the light you are too close.

THE GULF ISLANDS MAJOR HAZARDS





Clam Bay 48°59.0'N 123°39.0'W

The bay between the north end of Kuper Island and southeast Thetis Island has a drying bank at its head and Boat Passage, a dredged channel into Telegraph Harbour. Centre Reef and rocks, in the centre of Clam Bay, obstruct the approach to Boat Passage. Centre Reef is marked by a red conical buoy. Daymarks define the eastern entrance to the cut. Caution: Proceed dead slow into Clam Bay, between Centre Reef buoy and Penelakut Spit. Do not attempt passage between Centre Reef buoy and Leech Island, not use Boat Passage without local knowledge.



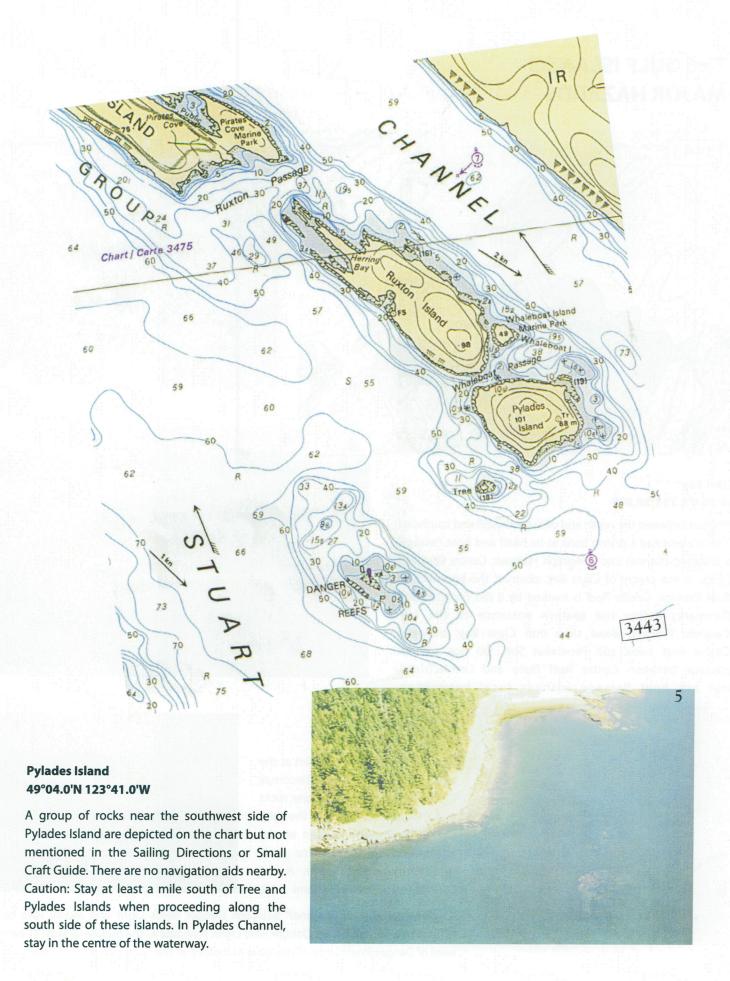
DANGER 3 443 P 50 P 03 0 3 3 REEFS 1 100 30 P 03 0 7 20 P 03 0 P 03

Danger Reefs 49°03'N 123°42.8'W

One mile north of Miami Islet at the junction of Stuart and Trincomali Channels, several underwater rocks and reefs lie mainly west of the light. Danger Reef Light situated on the north end of the centre rock, is a whitecircular tower. A red conical buoy marks Miami Islet.



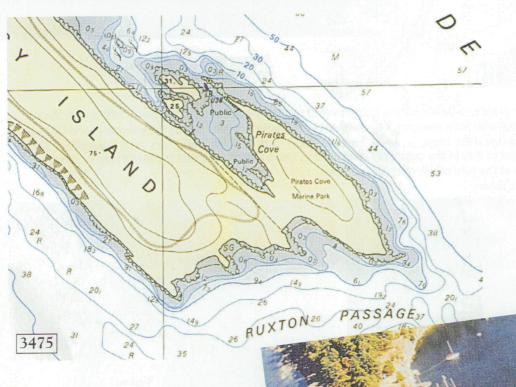
Caution: "Middle the channel" between Danger Reefs Light and Miami Islet buoy; at least one-half mile from Danger Reef Light. Navigate in the middle of Stuart Channel, west of Danger Reefs Light. If you have to look up at the light, you are too close!





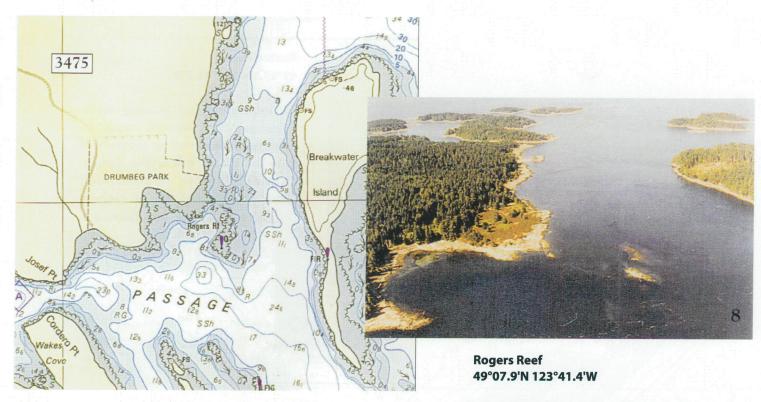
Ruxton Pass 49°05.3'N 123°42.3'W

Separates Ruston and DeCourcy Islands. A starboard-hand daymark, situated on a reef near the northwest extremity of Ruxton Island, marks the danger. Caution: Stay in mid-channel, which is deep and free of dangers. Do not anchor near the daybeacon.



Pirates Cove 49°06.6'N 123°44.0'W

Near the southeast end of De Courcy Island. A drying reef extends northwest from the peninsula forming the cover. Pirates Cove day beacon, situated on the reef, is a port-hand daymark on a concrete base. A red buoy, U38 is just west of the daybeacon. North of the drying reef, a white line on a rock and white cross on a pole serve as a range to clear the north end of the reef. Caution: Use the range to clear the north end of the reef and pass between the beacon and red buoy when entering Pirates Cove.



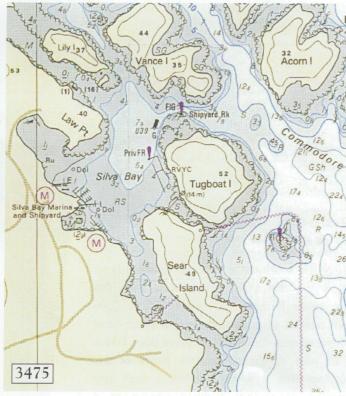
Located on the north side of the east entrance to Gabriola Pass, kelp-covered rocks extendboth east and south of this reef. Strong currents can set vessels onto these rocks with little warning. Rogers Reef Light, a white circular tower, Breakwater Island Light, a white circular mast, and Gabriola Passage East Light, a white circular tower with a black band, are local navigation aids. Caution: Steer on Breakwater Island Light to stay in the centre of Gabriola Pass. Use Gabriola Pass East Light as a lead or stern mark to clear Transit Gabriola Pass only at the turn of the tide. (slack water).

Refer to the Canadian Tide and Current Tables.



Silva Bay 49°09.0'N 123°41.0'W

Between Tugboat, Acorn and Gabriola Islands. The Approach has outlying reefs east-southeast of Acorn Island. Strong currents from Gabriola Pass can set you onto these reefs. A narrow channel with a reef at the Entrance extends well west of the daybeacon. Tugboat Island Light, a white circular tower, Silva Bay Light, a white circular mast with port-hand daymark on Shipyard Rock, and a green spar buoy west of the Silva Bay Light are vital aids to navigation. Caution: Approach: Steer on Tugboat Island Light, in the middle of



the channel between Acorn and Bath Islands. Compensate for the current if it sets you toward either island. Entrance: Proceed slowly, keeping the daybeacon on your port side, when entering Silva Bay and do not turn left until clear of the green spar buoy. Start your left turn prior to reaching the southern tip of Vance Island.

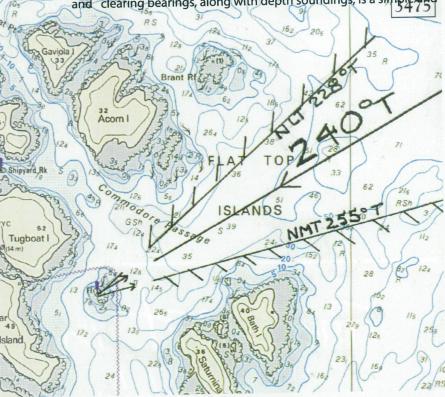
Clearing the Rocks

Boaters who run aground in the Gulf Islands often misjudge distances at a critical time. In these confined waters, when fixing is impractical, a simpler technique is essential. Without sophisticated electronics, clearing marks and clearing bearings are the answer. You need only a hand-bearing compass and depth sounder. For example: entering a harbor, you want to stay clear of rocks on your port side. On your chart, it is apparent that when a light and a point of land are aligned, a line extended from them runs clear of dangers. The light and point of land are clearing marks. As long as you stay inside the clearing line defined by them you are in safe water. If your boat drifts so that the clearing marks come into line you are standing into danger. Alter course away from the clearing line. Use clearing bearings when clearing marks are not available. Draw a line from a lead mark along a bearing which will clear the danger. Lead marks are simply conspicuous objects ahead of the boat that provide an "aim point" for the helm and help you determine if you're drifting off track. Stern marks are used when the only reference object is

behind your being into practice on your starboard side and wreck to port. On a track of 270° heading toward a light ahead that's beyond the dangers, you will remain equidistant from both the rocks and the wreck. Anticipating some current in the area with no time to plot a fix, you'll want clearing bearings on both sides of your track. Draw a line from the lead mark to pass clear of the rocks on your starboard side.

The bearing is 260°, so the lead mark must never bear less than 260°. Label this clearing bearing "(not more than) NLT 260°". On the port side, a clearing bearing of 280° keeps you clear of the wreck. Label this one "(not more than NMT 280°". Any bearing grater than 280° and you risk joining the wreck! Confused by the "not less then" and "not more than" concept? Try this? Set your parallel rule to a bearing of 255° on the compass rose. Walk it over to the lead 285° from the lead mark will intersect the

wreck on the port side of your intended track because it's more than 280°. The value of clearing bearings is best illustrated in the approach to Silva Bay. Currents may set your boat onto the drying reefs off Acorn Island or the rocks near Bath Island. For the approach, you decide on a track of 240°T (True), leading on Tugboat Island Light. A clearing bearing of NLT 228°T will keep you clear of the drying reefs south of Acorn Island. The rock near Bath Island lies outside a clearing bearing NMT 255°T. All you have to do is aim at Tugboat Island Light on a course of 240°T, and frequently observe this lead mark with your hand-bearing compass. If the bearing decreases, you are being set toward Acorn Island. Immediately alter course to port. Conversely, if the bearing increases you are drifting toward Bath Island. It only takes a few seconds to determine if you are safely within your clearing bearing, and you don't have to leave the helm to plot fixes. Another important tool for staying out of trouble is your depth sounder. In the majority of Gulf Islands groundlings, the sounder wasn't on! Before relying on the depth sounder, take two precautions. First, determine whether the sounder is reading from the bottom of the hull or the bottom of the keel. If the reading is from the hull, you must subtract the keep depth for the correct depth under the keep – a difference of 3-4' for many sailboats. Post a warning to this effect, prominently on or near the instrument. Second, work out the height of the tide in advance, so you can correctly interpret your depth readings. Again, it's a good idea to post the correction. Frequently checking clearing marks and clearing bearings, along with depth soundings, is a simple and



professional navigation technique. Any drift of your vessel will be detected immediately and you can take corrective action early. Navigation in confined waters becomes relaxed and the uncertainty of determining distance is removed. Had the hapless mariners in my Gulf Islands study taken these simple precautions, \$87,700 in insurance claims would never have

Barrie Jackson



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