October 2017

CHN MARINE PLANNING PROGRAM NEWSLETTER

Kii.ngaay Taang.aay
Saltwater News

www.haidanation.ca

IN THIS ISSUE

Photo: Stef Olcen

A sgaana *orca* emerges out of a kelp forest.

Oceans Protection Plan

On November 7, 2016, Prime Minister Trudeau announced $1.5 billion in funding for an Ocean Protection Plan geared towards the development of a "world-leading marine safety system ... that will increase the Government of Canada's capacity to prevent and improve response to marine pollution incidents."

The national plan will include new measures geared towards the protection of the Pacific Northwest's coastline, including the development of a new regional oil spill response plan for the Great Bear Region (this designation includes Haida Gwaii), the addition of four new lifeboat stations, the installation of towing kits on Canadian Coast Guard vessels, and the establishment of tougher requirements for industry to act quickly in the event of an accident.

In addition, the OPP commits Canada to working with Indigenous communities in marine response, including the formation of Indigenous Community Response Teams trained in search and rescue, environmental response and integrated command. The OPP also commits Canada to the creation of a new chapter of the Canadian Coast Guard Auxiliary to support Indigenous communities assuming a greater role in marine safety in their community.

In a press release issued the same day as the OPP announcement, kil tlaats 'gaa *Peter Lantin*, President of the Haida Nation, was cautiously optimistic about the implications of the Plan for Haida Gwaii.

"With almost 5000 kilometres of Haida Gwaii coastline to protect, the Plan's initiatives add up to a good baseline from which we can build to address todays shipping issues." However, kil tlaats 'gaa also said that from the perspective of the Haida Nation, the initiatives "cannot be tied to a federal policy that is supporting heavy oil and LNG."

Shortly following the OPP announcement, the Prime Minister announced that the federal government was approving Kinder Morgan's Trans Mountain pipeline and Enbridge's Line 3, and rejecting Northern Gateway. On May 12, 2017 Trudeau's government also proposed the *Oil Tanker Moratorium Act* to establish an oil tanker ban on the north coast of British Columbia.

Both the rejection of Northern Gateway and the commitment to the establishment of a crude oil tanker moratorium were welcome news to many on Haida Gwaii and elsewhere on the north coast. However, both existing marine vessel traffic and the additional marine vessel traffic that may result from the federal government's recent decision to support Trans Morgan, continue to pose significant risks to the islands' ecology, economy and culture. The commitment to improve marine safety and emergency response made by the Prime Minister in November are a first step towards addressing this critical situation.

The Haida Nation is engaged with the federal government on several levels about OPP implementation. It is anticipated that specific elements of the OPP will be designed and delivered in consultation with the Haida Nation and other Indigenous governments.

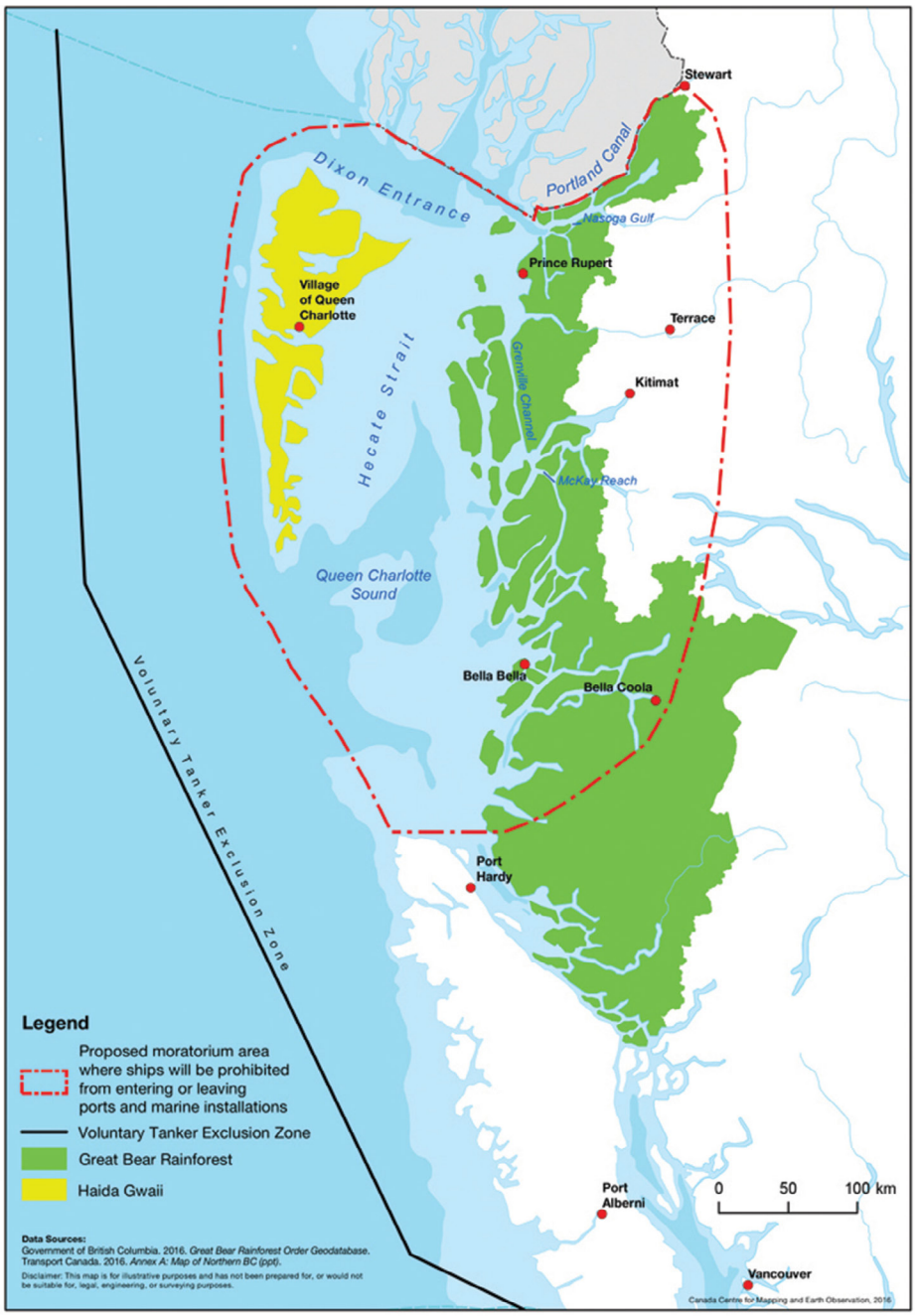

Photo: Department of Oceans and Fisheries

A European Green crab can vary in color from a yellow-red to dark-spotted green. Distinguishing this crab from others can be difficult, so look for the five spines or teeth on each side of the shell.

Green Crabs:

Nothing Yet

Lurking along coastal shores, with five spines on the side of its head and razor sharp claws- eating nearly everything and anything in sight is the European Green crab, *Carcinus maenas*.

The influx of Green crabs, which are not native to Haida Gwaii, have damaged the ecology and economy along the Atlantic and Pacific coasts and are considered one of the "ten worst alien invasive species in the world" by the Department of Fisheries and Oceans.

"They are quite disruptive when they arrive, if you catch them quickly, then you might be able to stop them, but once they are established you cannot get rid of them," explains Stu Crawford, Marine EBM Monitoring Coordinator with the Haida Oceans Technical Team. As the Green crabs hunt for food, they dig up eel grass beds, destroying a place of shelter for juvenile fish to grow and smolt. They also damage clam beds and other shellfish populations. In extreme circumstances, the crab out-competes native crabs for food and space.

First spotted on and then detected on the west coast of Vancouver Island in 1999, the crabs are now a concern locally as they were recently found at Gale Passage near Bella Bella.

"They may eventually spread to Haida Gwaii from the central coast by ocean currents, because the larva is free-floating. But they can also be moved to new areas by people, which is probably how they got to the central coast. Juveniles can be hidden in fishing gear or larva can arrive in a ship's ballast water," explains Crawford.

The Haida Oceans Technical Team and Gwaii Haanas are actively preparing to prevent the crabs from establishing themselves

Photo: Terri J Bell, CHN Marine Planning

(l-r): Stuart Crawford, Marine EBM Monitoring Coordinator, Haida Oceans Technical Team; Niisii Guujaaw, Resource Technician, Gwaii Haanas; Clint Johnson, Resource Conservation Officer, Gwaii Haanas; and Tom Therriault, Research Scientist, DFO set off to test their traps for capturing Green crabs.

Photo: Terri J. Bell, CHN Marine Planning

An abundance of Red Rock and Dungeness crab were found in the traps set in Naden Harbour. If Green crabs become established here they will radically alter the ecosystem.

in local waters by taking training that will enable them to effectively monitor and identify this invasive species. In June of this year, Tom Therriault, a research scientist with the DFO invasive species program traveled from Nanaimo, BC, to provide assessment training.

As part of their training, the team traveled to Naden Harbour to sample three different locations considered by Therriault to be most suitable for Green crab to establish. His areas of choice is based on stream location, floor sediments, and ocean salinity. Thankfully, no crabs were found in any of the traps the following day!

Clint Johnson and Niisii Guujaaw will be training other Gwaii Haanas staff, and HOTT will train the Haida Watchmen. In addition to monitoring local waters for early detection, HOTT is developing a management plan to try and prevent Green crabs from arriving and a rapid response plan should they be detected.

PROTECT THE OCEAN

If you see a Green crab DO NOT put it back into the ocean! Notify CHN and DFO (contacts below). If possible take a photograph and then freeze the crab – CHN and DFO will want the specimen to confirm the invasion.

Please do your part and consider taking these precautions while fishing:

- **Clean, drain and dry off your boat and other equipment before heading into a new area. This will help stop the spread of Green crabs in their larvae and early juvenile stage.**
- **Inspect your boat including the propeller, rudder, niche areas and boat trailer.**

Please contact Stuart Crawford (CHN) stuart.crawford@haidanation.com or 250-626-3302 and DFO at 1-888-356-525.

A Haida Gwaii Herring Story

Fronds of k'aaw *herring spawn-on-kelp* drying on a line.

What stopped the herring roe fishery from occurring in Haida territory in 2014, 2015 and 2016? What are the connections between conservation and rights? Do our co-management agreements with Canada support Haida marine rights and conservation?

An article recently published in the international ocean policy studies journal *Marine Policy*, addresses questions about the Haida Nation's pursuit of commercial access rights to, and management of, iinang *herring* fisheries for close to two decades.

Authored by Nang Jingwas *Russ Jones* (Manager – CHN Marine Planning), Catherine Rigg (Contractor – CHN Marine Planning), and maritime anthropologist Evelyn Pinkerton (Simon Fraser University), "A Haida Gwaii Herring Story" provides a detailed analysis of the factors that resulted in the Haida Nation's successful prevention of the herring roe fishery from 2014 to 2016. A key factor was the successful application for an injunction brought by White Raven Law on behalf of the Council of the Haida Nation in 2015 that prevented opening of the herring roe fishery in Haida Gwaii. The application was supported by affidavits from kil tlaats 'gaa *Peter Lantin*, Gaagwiis *Jason Alsop*, GwaaGanad *Diane Brown*, Guujaaw and Nang Jingwas.

The authors explore the relationship between aboriginal title and rights and iinang. On Haida Gwaii, Haida Title and Rights raises the standards by which the Crown has to consult and accommodate the Haida Nation in the management of iinang, which in turn reinforces the Haida Nation's right to manage and conserve stocks. The authors argue that the successful injunction in 2015 was the result of four interrelated factors: first, that the Haida Nation had not been adequately consulted and accommodated based on our strong case for aboriginal title on Haida Gwaii; second, that the spirit and intent of existing co-management agreements, and specifically the *Gwaii Haanas Marine Agreement* (2010), were not adequately respected in decision-making; third, that a fishery would result in irreparable harm to iinang and, in turn, irreparable harm to Haida culture; and fourth, that strategic negotiation and confrontation by the Haida with government and industry ultimately supported herring closures and associated conservation outcomes.

"The future of herring management is at a crossroads," the authors say, with one road being the status quo in which a small number of commercial fishers fish under a regional strategy, and the other leading to local management that supports local solutions to conserve stocks. In turn, this second path could, the authors suggest, lead to more secure access to iinang and k'aaw for traditional and commercial use.

The Haida Gwaii herring story is, in fact, still being written. For now, the Nation's insistence on this second path has finally been heard by Canadian courts and industry. This article explains why and sets the stage for a future that ensures the well-being of Haida Gwaii herring and Haida communities.

For more information related to the "Haida Gwaii Herring Story" article and where to find it, please email molly.clarkson@haidanation.com

A G̱iinuu *Giant Red sea cucumber (Parastichopus californicus)* in its natural habitat.

G̱iinuu gung k̲’uula

Giant Red sea cucumber tastes good going down your throat!

Slinking through the night, a sleek and solitary sea cucumber slurps at a dusting of organic matter on the ocean floor - dead animals, plant materials, small marine animals, bacteria and diatoms - using its twenty feather-duster feet to bring the morsels to its five gaping mouths. Known as ‘vaccuum cleaners of the sea’ these succulent scavengers break down organic matter into such miniscule pieces that the nutrients become available to much smaller organisms.

Found all over the world, these beautiful animals belong to the echinoderm phylum – a phylum whose species (such as sea squirts, sea urchins and sand dollars) are recognizable by their shared symmetrical radial pattern. Approximately 1700 species of sea cucumbers are found all over the world.

There are at least 41 species of sea cucumber recorded on Haida Gwaii. The most common species include g̱iinuu *Giant Red sea cucumber (Parastichopus californicus)*, the Orange sea cucumber *(Cucumaria miniata)* and the Pale sea cucumber (*Cucumaria pseudocurata pallida*). Each species has a preferred ocean substrate habitat – while the Orange sea cucumber enjoys wedging itself under rocks in exposed sites, Giant Red sea cucumbers tend to prefer sandy substrate in more sheltered areas, such as inlets, where organic matter easily settles onto the ocean floor.

In the waters of the northern Pacific Ocean, sea cucumbers are preyed upon by creatures such as sea otters, sea stars, crabs and fish. In response, these animals have developed a number of ingenious defense mechanisms. Their camouflaging and hiding skills help then to avoid detection, while their tough skin repels all but the most persistent predators. Most impressively, many sea cucumbers have developed the capacity to anally eject most of their internal organs. These edible organs can distract their predators long enough for the sea cucumber to flee and

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grow the organs again, in peace. Scientists hypothesize that sea cucumbers do this voluntarily in the winters as well, to conserve their energy while they wait for the spring.

According to Nang Sw̲aansing *Solomon Wilson*, co-author of *The Knowledge and Usage of Marine Invertebrates by the Skidegate Haida of the Queen Charlotte Islands* (1981), "in the early days the head of the fresh sea cucumber was bitten off and eaten raw by many people." To prepare g̲iinuu for cooking, Haidas would squeeze out the soft internal organs and then skewer and secure the g̲iinuu onto tree branches. The g̲iinuu would then be rubbed vigorously across barnacles "for about twenty minutes until the bud-like bumps on the outside skin, as well as much of the slime, were rubbed off." The g̲iinuu would then be soaked in cool water to allow them to soften out before being boiled and eaten like sausages.

A more recent Hydaburg recipe is g̲iinuu fried rice, where the muscles strips are peeled off of the skin, chopped into small pieces, and mixed with rice, fried egg, onions, celery and bacon. Yum!

The G̲iinuu Commercial Fishery

The commercial fishery for g̲iinuu on the west coast began in 1971. Today, the commercial g̲iinuu fishery continues on the Central Coast and has been expanded to other areas. It is managed in a variety of ways, including effort controls (limited entry and area licensing; quota management areas), harvest controls (Total Allowable Catch; Individual Quotas; Area Quotas), and other controls such as catch monitoring, a rotational-style fishery, minimum density thresholds, survey requirements, and commercial 'no-take' reserves.

In the cool waters of the Pacific Northwest, g̲iinuu spawn in June, July and August, although they sometimes spawn in the late spring. Commercial divers handpick g̲iinuu from October to December, when the animals have expelled their internal organs and their skin is at its thickest.

HAIDA USE

"One sunny morning in May, 1973, I [David Ellis] carried my kayak over the tidal flats in front of Skidegate Village, launched it, and headed for...Sgayaas, just offshore. The small island was at its most beautiful. The sun fell brightly upon its white cliff and the low tide had exposed its rich inter-tidal zone. I headed for the small beach, where I had been told that the g̲iinuu...were very plentiful. I stopped paddling as I neared the island and looked down through the clear calm water. There were dozens of sea cucumbers, immobile and vulnerable. I landed on the rocky beach and began collecting those cucumbers that had dried up with the tide. Soon I headed back to the village with a bucket full of slimy creatures."

Nang Sw̲aansing *Solomon Wilson* and David Ellis *The Knowledge and Usage of Marine Invertebrates by the Skidegate Haida of the Queen Charlotte Islands* (1981)

The Total Allowable Catch (TAC) for g̱iinuu remained constant at approximately 1.2 million pounds between 2003 to 2010 until 2011 when it increased to 1.36 million pounds. A growing demand for g̱iinuu in Asia – particularly Hong Kong and China – where they are valued for their flavor-enhancing properties as well as medicinal purposes, has resulted in a doubling of the price paid to harvesters over the past decade. In 2014, g̱iinuu was BC's nineteenth ranked seafood export with a value of ten million dollars.*

The commercial fishery for g̱iinuu in Haida Gwaii was closed in 1996 while research was conducted on the Central Coast, including an experimental approach to g̱iinuu fishing. In the spring of 2012, Haida Fisheries in partnership with the Department of Fisheries and Oceans (DFO) and the Pacific Sea Cucumber Harvesters Association conducted surveys in the K̲uuna Gwaay.yaay *Louise Island*, K̲'uuna K̲'iidaay *Louise Narrows*, Hlk̲inul K̲aahlii *Cumshewa Inlet* and K̲aana *Carmichael Passage* areas, as well as areas within Gwaii Haanas.

Following these surveys, in October 2012 DFO opened the K̲uuna Gwaay.yaay area to the commercial g̱iinuu fishery. CHN protested on the water, stopping the fishery before the full quota was taken. The DFO subsequently included K̲uuna Gwaay.yaay in the 2015-2016 Integrated Fisheries Management Plan for the commercial g̱iinuu fishery; however, the fishery never took place. The CHN is continuing to work with DFO and Gwaii Haanas to determine whether a sustainable commercial fishery for g̱iinuu is possible on Haida Gwaii.

** Currently, the domestic market for g̱iinuu is quite small. There are, however, indications that this market may also be opening up to the flavours of g̱iinuu. In late January 2017, the Vancouver Aquarium's Ocean Wise program announced the certification of the British Columbia Giant Red sea cucumber fishery. A flurry of newspaper articles have followed, urging people to try this homegrown delicacy.*

G̱IINUU FRIED RICE • SERVES 4

Ingredients

- 5 strips of bacon
- 1 onion
- Three pieces of celery
- 4 cups of cooked white rice
- 4 eggs
- Muscle strips from one g̱iinuu
- 2 tbsp. soy sauce

Instructions

1. Finely chop the strips of bacon, onion and celery. Fry the bacon for 3 minutes, then add onion and celery and fry for another 5 – 8 minutes.
2. Finely chop the strips of g̱iinuu muscle. Mix the chopped g̱iinuu and the cooked white rice in with the bacon, onions and celery and fry for another 3 minutes, stirring constantly.
3. Mix in eggs and soy sauce. Cook for another 4 minutes, stirring continuously until the eggs are cooked and everything is blended evenly.
4. Enjoy with family and friends!

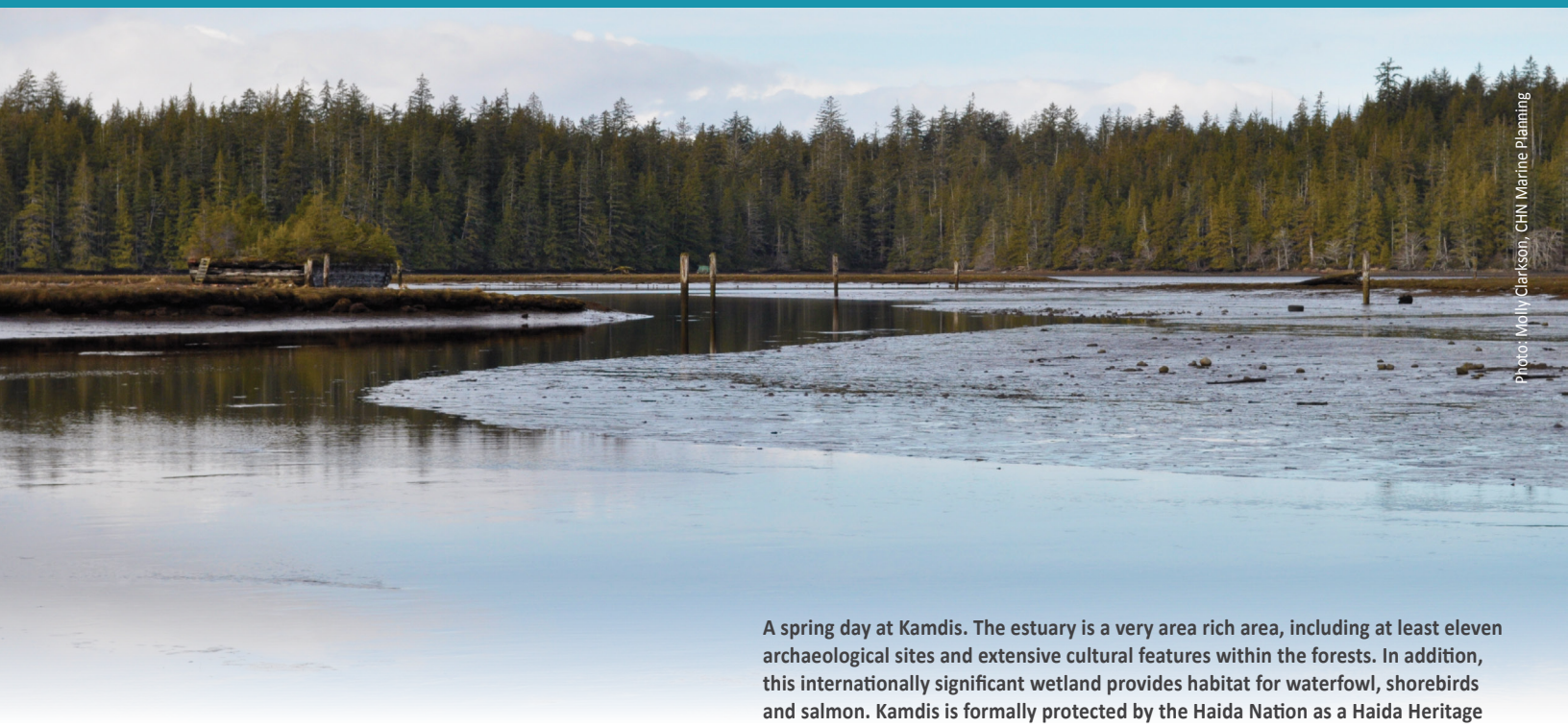

Photo: Molly Clarkson, CHN Marine Planning

A spring day at Kamdis. The estuary is a very area rich area, including at least eleven archaeological sites and extensive cultural features within the forests. In addition, this internationally significant wetland provides habitat for waterfowl, shorebirds and salmon. Kamdis is formally protected by the Haida Nation as a Haida Heritage Site and the Province of British Columbia as a conservancy.

Marsh Mud

Monitoring the effects of sea level rise at Kamdis

At first glance, salt marsh ecosystems don't look as impressive as towering temperate rainforests, but these intertidal areas are increasingly recognized as a vital component of the marine ecosystem. The lower sections and tidal channels of salt marshes, which are flooded daily, act as nurseries for many species of fish, including herring, salmon, cutthroat trout, and stickleback. Mud flats, found below salt marshes, contain many burrowing creatures such as mussels, clams, crabs and worms. In addition, the decaying plant matter from the salt marsh feeds a variety of animals, both macro and micro, as well as a variety of other microorganisms such as bacteria and fungi. These organisms, as well as the decaying plant matter that they don't eat, wash out to sea and become part of the marine food chain.

Salt marshes form in sheltered estuaries, where the waters are calm enough that sediment flowing out from rivers or streams is able to settle and accumulate. Over time a mud flat is created providing a nutritious environment for salt-tolerant species of herbs, grasses and low shrubs. The lush salt marsh meadows that develop further slow the flow of freshwater increasing the level of sedimentation. This, in combination with the large volume of plant matter growing and decomposing slowly grows the tidal marsh above sea level. However, as climate change increases the rate of sea level rise, scientists all over the world have been asking the same critical question: When sea levels rise, do salt marshes rise with them?

While researchers consider the growth of salt marshes to be keeping pace with or exceeding historical sea level rise, the increased rate of the rise associated with climate change may result in the partial or complete submergence of many salt marshes.

To measure the effects of sea level rise on local salt marshes, the Council of the Haida Nation partnered with the Ministry of Forests, Lands and Natural Resource Operations and Rural Development (MFLNRORD) and the West Coast Conservation Land Management Program (WCCLMP)*. The team, which included Stuart Crawford (Marine Ecosystem-based Management

Photo: Molly Clarkson, CHN Marine Planning

Karen Barry, Restoration and Inventory Biologist with the West Coast Conservation Land Management Program (WCCLMP), installs a datalogger to measure air pressure in a ts'uu *cedar* tree.

Photo: Molly Clarkson, CHN Marine Planning

From left to right: Alvin Cober (MFLNRORD), Stuart Crawford (CHN) and Shawn Lukas (WCCLMP) work as a team to install the Rod Surface Elevation Table (rSET) platform. The SET consists of an aluminum platform that is permanently installed in the estuary and anchored to prevent any movement. To take measurements, a specialized reader arm is brought out to the estuary and mounted on the platform. Rods are then lowered from the arm onto the surface of the salt marsh (see photo and associated caption below).

Photo: Molly Clarkson, CHN Marine Planning

Karen Barry measures the height of a series of rods resting on the estuary ground. Over the long term, measurements at the Kamdis site will provide managers with information about the erosion or building up of the Kamdis salt marshes, which is a factor in its resilience against sea level rise.

Monitoring Coordinator, CHN), Karen Barry (Restoration and Inventory Biologist, WCCLMP), Shawn Lukas (Field Operations Coordinator, WCCLMP), and Alvin Cober (Ecosystems Biologist/ Habitat Officer, MFLNRORD) installed monitoring equipment at the Kamdis salt marsh this past March. The monitoring equipment included a device to measure the elevation of the salt marsh over time, a datalogger to measure water pressure, temperature and salinity, and a datalogger to measure air pressure. Data from these instruments will be collected twice a year, and will inform long-term management of the Kamdis salt marsh.

The Kamdis installation is part of a coast-wide monitoring initiative being led by the WCCLMP. The same selection of monitoring equipment has also been set up at six estuaries on Vancouver Island and three estuaries on the central coast. The overall goal of the program is to ensure that estuaries and salt marshes continue to provide high quality and accessible habitat for fish and wildlife, and to identify conservation concerns resulting from threats such as sea level rise, invasive species, or other human-induced changes.

** The West Coast Conservation Land Management Program is a partnership between Environment Canada, the Province of British Columbia, the Nature Trust of British Columbia, Ducks Unlimited Canada, and the Habitat Conservation Trust Foundation.*

Bubblegum coral (*Paragorgia arborea*) habitat includes the west coast of Haida Gwaii.

Tang.G̲wan Llnagaay
Underwater Villages

Conserving cold-water coral and sponge habitat in Haida territorial waters.

Mysterious creatures flourish in the cool deep ocean. Found between 40 metres and 2,000 metres below the surface, cold-water corals and sponges have recently come into the spotlight with the discovery of a new species of sponge at SG̲aan K̲inghlas – Bowie Seamount Marine Protected Area (MPA), the recent designation of the Hecate Strait/Queen Charlotte Sound Glass Sponge Reefs MPA, and the underwater explorations of the glass sponge reefs in the southern Salish Sea by the Canadian Parks and Wilderness Society. As cool as they might be, cold-water corals and sponges are red hot right now!

Photo: Royal BC Museum

This new species of marine glass sponge - *Doconesthes dutinchiversi* - was collected at SG̱aan K̲inghlas – Bowie Seamount Marine Protected Area as part of a Fisheries and Oceans Canada project in the summer of 2014.

So, what's the big deal about cold-water corals and sponges? To start, scientific research has demonstrated the significance of these animals in the marine ecosystem. The reefs that are built of corals and sponges are essential habitat for other marine organisms, including juvenile and adult rockfish and invertebrates such as sea fans, sponges, worms, starfish, brittle stars, sea urchins and crustaceans. In addition, cold-water sponges filter huge amounts of nutrient-rich ocean water through their porous skeleton in order to feed themselves, and in the process, they also clean the water and sequester carbon in their bodies.

These species have the potential to help humans track climate change impacts too. Like trees, corals have 'growth rings' that serve as a useful tool for measuring how corals coped with changes to the environment in the past. The growth rings contain records of what life was like back then. Incredibly, scientists can use these growth rings to measure how much food corals had access to, how much light they were exposed to, and the temperature of the surrounding water!

The other big deal about these marine animals is that they are extremely vulnerable to human activities like fishing. There are two types of impacts fishing gear can have on these animals: direct, like dragging or crushing; and indirect, like smothering due to the accumulation of sediment on corals and sponges. Trawl fisheries, trap and bottom longlining fisheries all pose a threat, with dragging leading to the most severe habitat destruction.

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Photo: Living Oceans Society.

A rockfish hides in a red tree coral (*Primnoa pacifica*) in Gandaawuu.ngaay Xyangs *Juan Perez Sound*.

The impact on corals and sponges from human activity is made worse by their very slow recovery rates. While there has been limited scientific research on this subject, the cold temperatures and inconstant food supply in the deep ocean suggests that most corals live for a long time, grow very slowly, and successfully reproduce infrequently. This means that the recovery of deep-water coral from fishing is most likely very slow – in the order of hundreds of years. In places where the habitat is heavily altered, recovery may never happen.

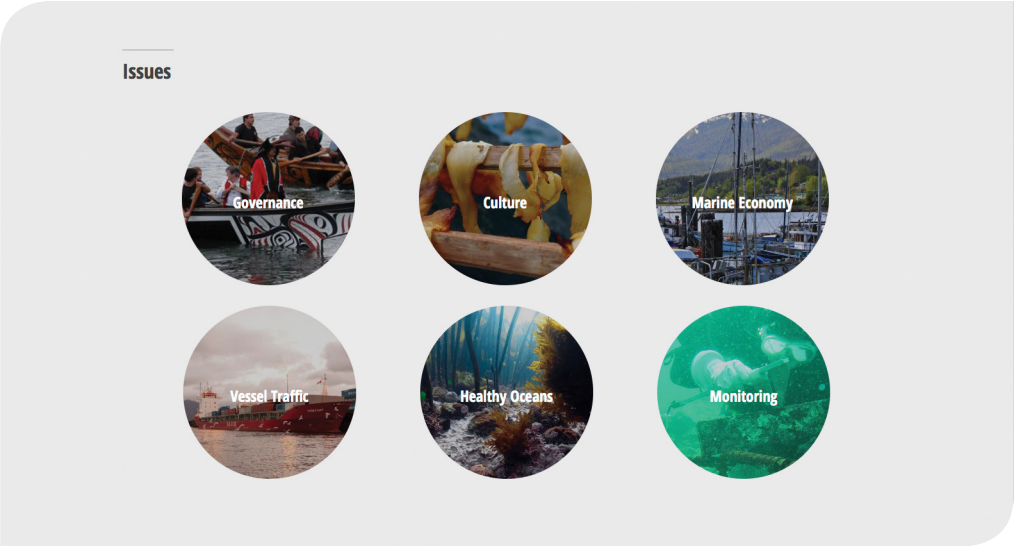
For species with long population recovery times, precautionary management strategies are a clear benefit. This is increasingly recognized on the Pacific Northwest coast, where important coral and sponge areas such as SG̲aan K̲inghlas – Bowie Seamount and the Hecate Strait/Queen Charlotte Sound Glass Sponge Reef have been protected under federal and, in the case of SG̲aan K̲inghlas, Haida law. In addition, the Protection Management Zones outlined in the Haida Gwaii Marine Plan (2015) include about half of the cold water coral and sponge area identified in DFO's Phase I EBSA (Ecologically and Biologically Significant Area) Study within Haida Gwaii MaPP Sub-region.*

These designations do not guarantee protection of coral and sponge habitats, however. For example, existing management direction for SG̲aan K̲inghlas – Bowie Seamount and the Hecate Strait/Queen Charlotte Sound Glass Sponge Reef does not completely prohibit fishing within the boundaries of the MPAs.** In addition, the Haida Gwaii Marine Plan does not provide management direction regarding fishing in the PMZs due to the lack of federal involvement. The protection of these sensitive and ecologically significant habitats is a priority for the Council of the Haida Nation, who are working with other governments to assess the impacts of fishing gear on cold-water corals and sponges, including their ability to recover from these impacts.

** Coral and Sponge Important Areas were areas identified as aggregations of coral and sponge based on analysis of groundfish trawl bycatch data.*

*** Both the SG̲aan K̲inghlas – Bowie Seamount and the Hecate Strait/Queen Charlotte Glass Sponge Reefs Marine Protected Areas contain "core zones" for protection and "buffers" or "adaptive management zones." While commercial fishing activities are not permissible within the core areas, some fishing activities are permissible within the buffer zones of these MPAs. For more information related to the management direction for these MPAs, please refer to the Fisheries and Oceans Canada website.*

CHN Marine Planning Program Launches Updated Website



A snapshot of the CHN Marine Planning Program's redesigned and updated website.

If you want to know more about Haida Gwaii marine-related issues and planning initiatives check out our redesigned and updated website. It features videos, links and tons of information about governance, culture, marine economy, vessel traffic and healthy oceans. Find out more about planning processes such as the Haida Gwaii Marine Plan (2015), the SG̱aan K̲inghlas – Bowie Seamount Marine Protected Area, and the development of the Gwaii Haanas Land-Sea-People plan.

Planning is one thing and implementing those plans is another. Keep up to date by reading Kii.ngaay Tang.aay *Saltwater News* newsletters – available for download – as well as a page featuring local events and a contact section for those who have questions. Last but not least, the updated site has online mapping tools, forum proceedings, Haida traditional knowledge, sustainable marine economic development and shipping.

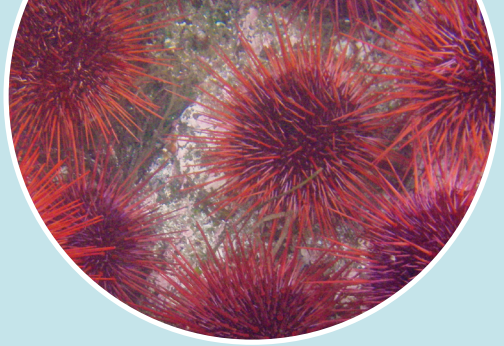
Go to **www.haidamarineplanning.com** to stay in the current!

ABOUT THE CHN MARINE PLANNING PROGRAM

The CHN Marine Planning Program is staffed by the Haida Oceans Technical Team (HOTT), a group of marine planning professionals who provide expertise and technical support for the CHN's marine planning and plan implementation initiatives, including:

- Haida Gwaii Marine Plan
- Gwaii Haanas Land-Sea-People Plan
- SG̱aan K̲inghlas-Bowie Seamount Management Plan
- Pacific North Coast Integrated Management Area Plan
- Tri-partite shipping discussions
- Marine Protected Area network planning

In addition, HOTT provides support for other marine-related initiatives, including: reconciliation, cooperative and coordinated management with BC and Canada, and communications and outreach.



ABOUT Kii.ngaay Taang.aay

The CHN Marine Planning Program developed this newsletter to provide Haida and other island residents, and the broader public, with information about the Haida Nation's marine planning initiatives. Each issue of Kii.ngaay Tang.aay features stories about specific marine-related projects that are underway in Haida Gwaii as well as updates on relevant laws, policies and reports that relate to the Haida Nation's marine planning and implementation activities.

Kii.ngaay Tang.aay is distributed to all of the communities of Haida Gwaii, and is also available online on the Haida Nation's website (www.haidanation.ca).

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Like the Council of the Haida Nation's Facebook page to get updates on the Nation's latest news, issues and events.

For more information about the CHN Marine Planning Program, including current issues and initiatives that the program is currently working on, check out our website at: www.haidamarineplanning.com