

Some of the other specific observations and trends noted for salmon in this seascape unit include:

- There used to be good gillnetting for coho and dog salmon in a lot of the inlet; fishery hasn't opened commercially for 10 years
- Commercial gillnet and seine fisheries for dog salmon in Long Inlet have been closed for at least 20 years
- The coho decline has occurred since the 1980s, but numbers may be recovering in the last couple of years
- There used to be a viable pink fishery in the inlet (e.g. Deena Creek)
- All creeks around Queen Charlotte seem to have fewer chum salmon returning to them
- Chum and pink declines might be due to poor ocean survival or habitat issues stemming from logging – sediment in creeks, loss of spawning gravels, etc.
- People used to be able to get coho and springs in many areas in the inlet (Alliford Bay, Maude Island, Renner Pass, Shingle Bay, etc.)
- The commercial spring fishery off Lawn Point/Bar Rocks is no longer open.

“You’d see fish jumping all over the inlet when I was younger. And they ran large net fisheries even and there was still plenty of fish returning to the streams. But since then, you hardly notice any jumpers.”
(Willie Davies, Mar. 2009)

“Oh, there’s been a dramatic change. ... We used to gillnet around the Inlet here for *sk’aagii* and humpies ...this inlet used to be just full of gillnetters and yet everybody was catching fish. You don’t see that anymore ... the way the fish used to be, them days, a lot of boats and a lot of fish—gillnetters all over—even all around out here, all the way up the inlet, seine boats, gillnetters. Not anymore.” (Harvey Williams, Apr. 2007)

Skidegate Inlet reflects some larger scale changes in regards to the commercial fisheries. The salmon declines have impacted what used to be a way of life for many Haidas in recent generations. There was formerly more work to be found building boats, working on boats, and in Skidegate Inlet canneries.

Quite a few years ago ... everybody owned a troller around here. There used to be up to 30-35 trollers anchored up out here... In the fall time they’d pull their boats up into the sheds ...the whole waterfront was boathouses, just side by side. (Harvey Williams, Apr. 2007)

Salmon food fisheries remain important in many areas of the inlet, despite fluctuations in abundances or preferences.

...we went out for the dog salmon when it came in. And that was good in the smokehouse. [We fished dogs]...all the way in the inlet... right from Sandspit like...Haans Creek and down Sachs Creek, and then we just moved as the fish was moving in. We’d end up at Slatechuck... we just followed them in. *Sk’aagii*... And some of it, we put a lot of salt on it afterwards and that was called *tl’lgiida*. It had to be soaked—that’s what that meant *tl’lgiida*—to soak it, because it was so heavily salted. And then, then you could boil it. It was basically the way we had it—was boiled—and...that was yummy. That was good stuff. (Herbie Jones, Mar. 2007)

Some other favourite traditional and contemporary food fisheries include:

- Fishing at Government Creek and the East and West Narrows for pinks and chums
- Spring fishing at Skidegate Channel, Grassy Island, off Sandspit and Bar Rocks
- Trolling for coho off shorelines, such as at Lawn Hill and Jungle Beach, off the dry bar at Sandspit, and at Alliford Bay
- Fishing for chums at Alliford Bay.

Government Creek was noted as one creek in the area that seems to have been consistent for salmon over the years. In this context, it was also noted that it is one of few creeks that remain unlogged.

There was also a potentially encouraging observation that the fall 2008 chum numbers seemed to be strong in some Skidegate Inlet creeks.

... this year I wanted to walk the creeks—Lagins Creek, right up the head of Long Inlet, the one over there in Christie Bay, Mud Bay and Slatechuck—we walked those creeks this year ... there was so many dogs in the inlet and it was so nice to see. It reminded me when we were kids, to see all that fish in the river. That Lagins Creek was just solid fish, all the way across. We walked up about a mile and there continued to be fish; there was that much fish in the river this year. So it was a really nice sign to see that. All dog salmon. And same as with Christie Bay and Mud Bay and Slatechuck—they all had an abundance of fish this year. So, things may be coming back, or are already back. (David Martynuik, Nov. 2008)

“The dog salmon would come up these creeks... and coho. When we were kids we’d all try and spear one and bring it home. The old people really, really liked dog salmon...they liked it smoked and my grandfather loved making *jam* [fish soup] out of it; he said it was the best *jam* – where nowadays everybody just wants sockeye. Every fall my grandfather took me up the Honna to spear dog salmon, on the Honna River. It was so wonderful. He’d get up and he’d say, ‘There’s no school today.’ I’d say, ‘Oh, why?’ He says, ‘Because we’re going to go get some fish today.’ He’d load up a tub ...he had a spear with a hook on the end, like a ... long gaff. He was, you know, getting on, and it wasn’t easy for him to get around but my, when we got time to go and get those dog salmon, he was like a young boy running around in the creek chasing. It was my job to throw rocks and chase the fish toward him, and then he’d gaff them and put them in the tub. Of course, we could only take, you know, what he could carry up—three or four—and then as soon as we got home he’d make a big pot of *jam* [fish stew] for us.” (Diane Brown, Apr. 2007)

Groundfish Populations

Within the Skidegate Inlet seascape unit, species like halibut, sole and flounders are traditionally fished along the east coast of Graham Island – the area just off the shore between Balance Rock and Lawn Point is a particularly popular spot. Skidegate Haida elders remember food fishing and camping around Halibut Bight and Jungle Beach, and staying there while they processed the fish in their smokehouses.

Today, many people from Skidegate still frequent these areas for food fishing groundfish. Commercial halibut fishing areas overlap with these traditional grounds; the commercial boats fish halibut off Sandspit Bar and up to Dead Tree and Lawnhill. There have also been commercial dogfish fisheries at the edge of this area, extending throughout Dogfish Banks, and out into Hecate Straits.

“In the summer, my mother would jig flounders – use *k’aaw* for bait – either in front of Jag’s or off the dock in Skidegate... in the winter months, the men would fish off of around Balance Rock and get another type of flounder. There’s two types – one’s called *t’aal* and the ones we got in the summer, I believe, is called *s^{gan} t’aal*... it was real fun, you know... especially if you’d walk up to Skidegate, there would be half a dozen ladies and of course a picnic.” (Diane Brown, Apr. 2007)

In past times it was more common for people to fish flounders and halibut right in Skidegate Inlet itself. Roy Jones Sr. mentioned fishing Skidegate or lemon sole from Skidegate all the way out to Sandspit Bar in the spring, and flounders right from the outside up to Queen Charlotte during the summers (Skidegate verification sessions, Jun. 2010). Some other favourite locations are out at the narrows, Trounce Inlet, Bearskin Bay, and at *Sgaay.yas* and *Gud K’aa^gwas*. Gray cod, greenlings and Pacific tomcod were also often fished at a reef off *Sgaay.yas* and *Gud K’aa^gwas*. Some of these groundfish populations are reported to be depleted today. Participants said that there are fewer halibut in the inlet these days, and blamed overfishing as the main cause. It is also possible that the reduction in the herring population is influencing halibut distribution and abundance. The gray cod and tomcod are no longer found in their usual locations, and there are observations that the usually plentiful sole found within Skidegate Inlet are also disappearing. One encouraging note is that flatfish outside Balance Rock, which had also declined in number in recent years, are now said to be recovering.

People also fish some species of groundfish – halibut and some rockfish in particular – out in Skidegate Channel, and there is some concern that recreational fisheries may be impacting these populations.

Rockfish are always there in abundance. I don’t know how Skidegate Channel is now though with the heavy sports fishing. Every day there’s hundreds and hundreds of fish taken out of there. I don’t know how it affected the rockfish. They’re catching a lot of halibut too... I don’t think it’s right. It’s a traditional food. Maybe more important than salmon. People used to eat a lot of rockfish. ... I imagine Skidegate Channel will be getting pretty sensitive, because of the sports fishing. There’s so many sports fishermen out there. If they can’t catch any salmon they go and catch rockfish. Rockfish and or halibut. (Percy Williams, Oct. 2008)

Groundfish observations and harvesting areas in Skidegate Inlet are shown in Figure 15.

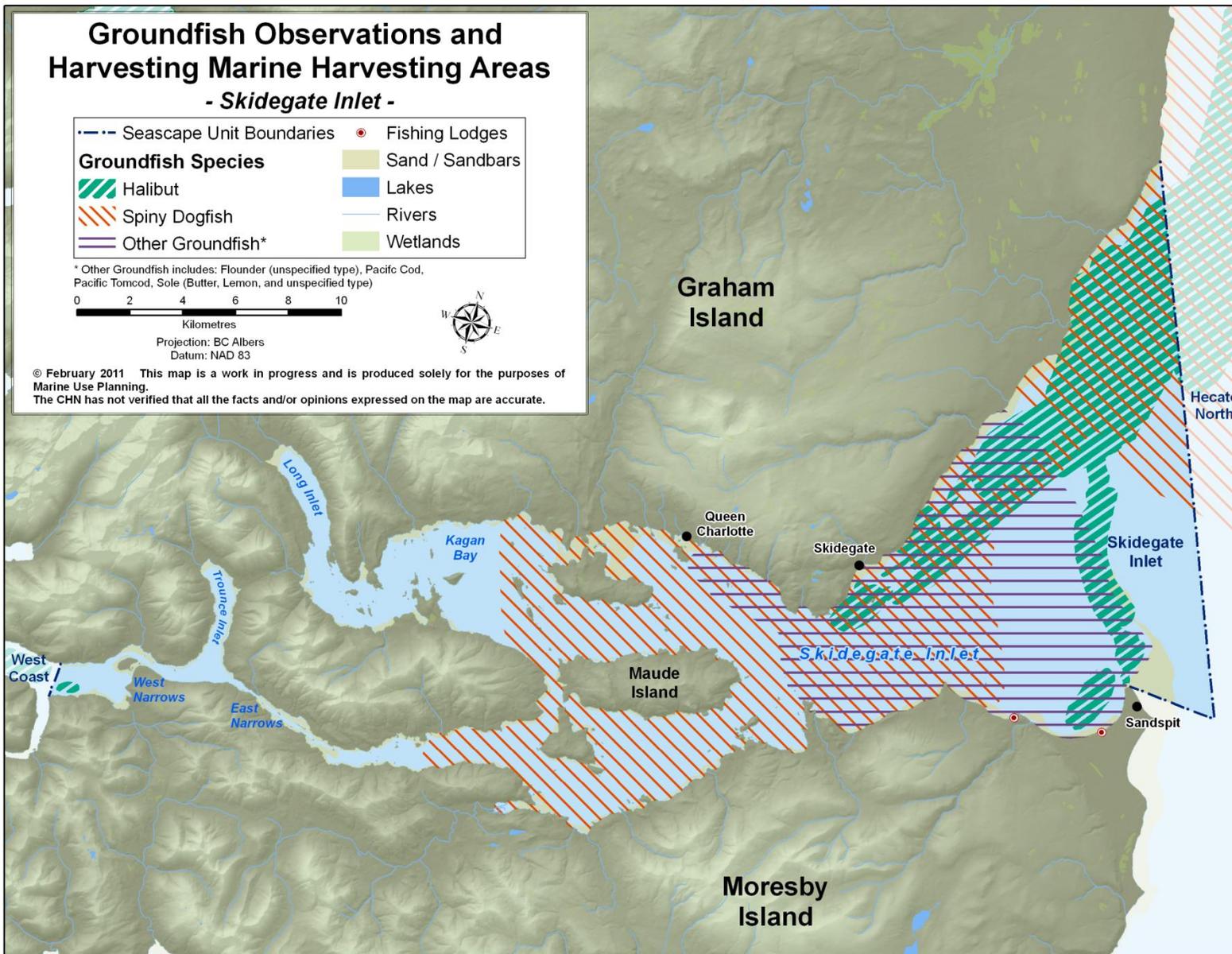


Figure 15: Groundfish observations and harvesting areas documented for Skidegate Inlet.

Shellfish Declines

Some shellfish have declined in Skidegate Inlet. Two examples are spider crabs in Long Inlet and shellfish in front of the village. Both are traditional foods and harvesting areas for Skidegate Haidas. For the shellfish in front of the village, some people think that the past sewage outfall may have had an impact.

... there used to be lots of fresh food, even right out here [in front of Skidegate]. Now it's all gone... cockles, and... *giinuu*... That's good eating. Used to be lots of it, too ...we used to pick up *styuu* even... at the point, right out here ... lots of *t'aa* and ah *sgida*—red chitons. And black ones, too. Yeah, all of that used to be out here... every big tide you'd go out and get whatever you can get. People used to be lined up all along here, years ago. Now you don't see anybody ...I myself think there's too much chemicals from the sewers that's got rid of everything. (Ernie Wilson, Mar. 2007)

Participants reported heavy fishing pressure as being the main cause of the spider crab depletion. Only elders remember this harvesting tradition, as the crabs seem to have declined mostly since the 1970s.

...Long Arm, oh, there's a little bay...across from Slatechuck... they used to get the crab in that little...[bay]... They're real delicious. They're same as those ones they call king crab from up Bering Sea, you know, but they're small...it's towards the end of January, I think. We go there just once in [awhile]...not too often. They just...stay there late in January or first part of February, I think. That's the only time they show up there and my auntie used to go and Watson used to go and get them there. (Tom Hans, Feb. 2007)

...up in Long Arm...all around the islands here, we used to get all...those big king crabs; we used to call them spider crabs...with the big long legs on them? We used to get oodles of them up there and they disappeared—all around the islands, outside here...a certain time of the year we used to get them, and they start mating and the big one would be holding onto the small female... instead of spearing them or anything, you just hook in between them; they won't let go of the female. You put it into the boat for awhile, they finally let go of the female and you just throw the female back in... just boil them in a big boiler. But before we got speed boats, the people that went out in their small trollers... they say they used to lose their meat real fast after you capture them... so they used to go ashore and make a big fire and boil them right on the beach, right away... real good... *huuga* [spider crab] ... (Harvey Williams, Apr. 2007)

It is possible that the spider crabs are no longer in Long Arm, as no recent harvests were recorded during the study. Some other observations and trends noted for Skidegate Inlet shellfish include:

- Dungeness crabs in the inlet have declined in number; only little ones are found in front of the village at low tide now; people used to be able to harvest there
- There used to be lots of abalone and urchins at the West Narrows; both have declined
- People aren't fishing Dungeness crab at Trounce Inlet as much now because traps get emptied
- There may be fewer octopus at some locations now
- There used to be green sea urchins at *Sgaay.yas* and on the point
- Introduced Japanese oysters are growing along the beach from the Honna dump.

Shellfish distribution and harvesting areas documented for Skidegate Inlet are shown in Figure 16.

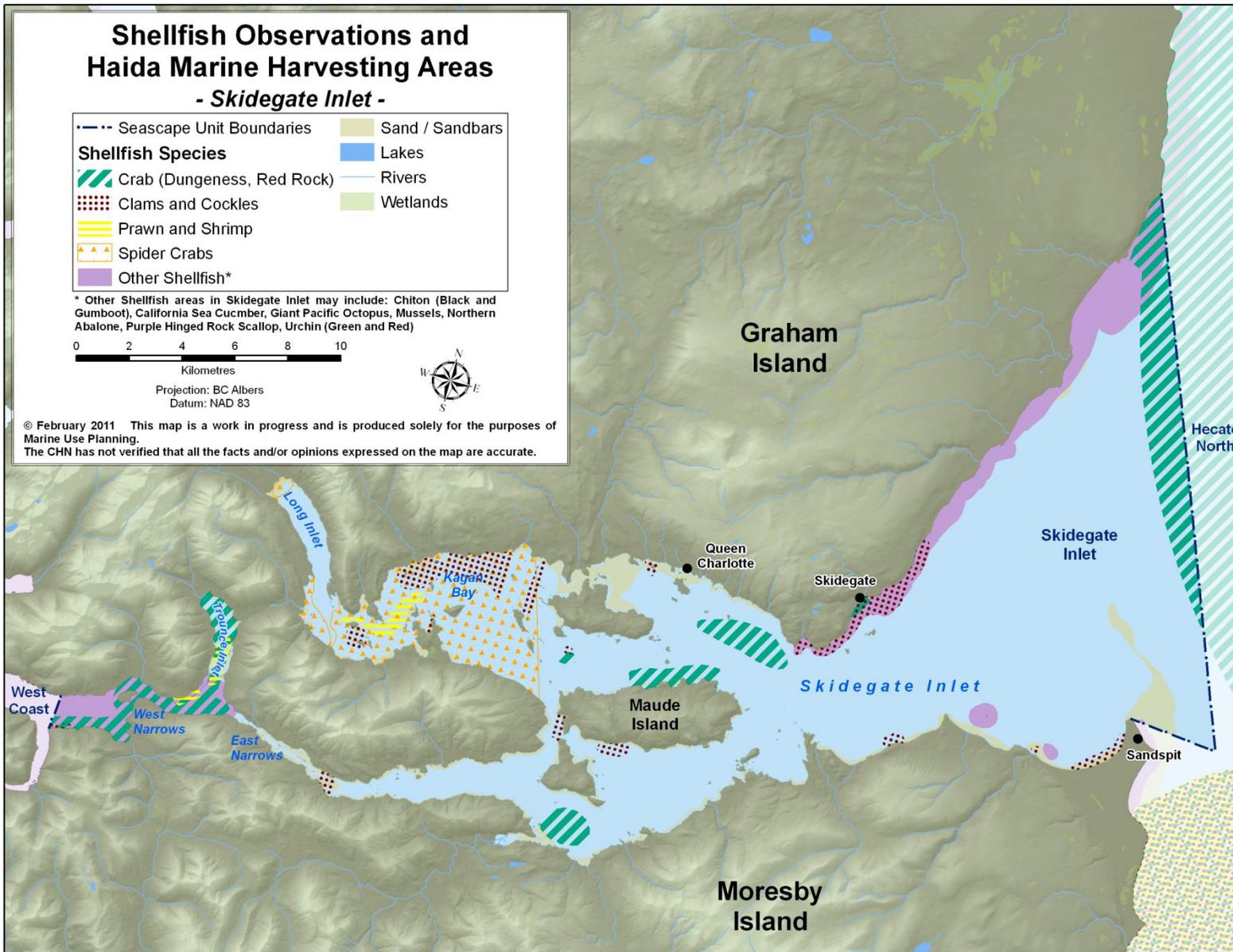


Figure 16: Shellfish observations and harvesting areas documented for Skidegate Inlet.

Nesting Seabird Populations

While this topic was not necessarily brought up as a management concern or issue, there were several participants that noted changes in nesting seabird populations. Haidas have traditionally harvested gull eggs at many locations within Skidegate Inlet, such as Welcome Point, Grassy Island, *Sgaay.yas*, *Gud K'aa@was*, Kwuna Point and Shingle Bay. In the past, oystercatchers and *sk'in xaana* or Ancient murrelets and their eggs were also harvested in some of the same areas. Several of these sites may be depleted today. The seagull rookery at Alliford Bay and the islands in front of Queen Charlotte were both mentioned as formerly having more abundant nesting seabird populations. It was suggested that overharvesting could be one cause, but there was also some discussion around the impacts of pollution on nesting seabirds, as well as raccoon predation.

We'd get... duck eggs on these islands, some seagull eggs...over here we'd get the seagull eggs. But that's before there was great big garbage dumps in Charlotte and Skidegate and what not; people don't get the eggs there now because there's too much pollution. ...I don't know if... anybody gets seagull eggs anymore, and if they do, it's probably...further down south, end of the island, where there's not all that pollution... (Paul Pearson, Apr. 2007)

Further discussion of seabird populations, including maps of seabird observations and harvesting areas are included for each of the 8 seascape units in ***HMTK Volume 3: Focal Species Summary***.

Issues Summary and Stewardship Suggestions

Haidas are very concerned about the status of herring and some salmon populations within Skidegate Inlet. Large historic commercial catches are thought to have been the primary impact on herring. In the case of salmon, it is thought that the impacts are cumulative, and include habitat destruction caused by logging, and poor ocean survival – possibly caused by global warming. There are also some observations that there are high numbers of predators, especially seals and sea lions at Sandspit.

Several areas were suggested for some level of protection or to be set aside for Haida use only. The overarching message was that it is important to protect areas that are easily accessible from the village. The specific recommendations include:

- Skidegate Inlet and Skidegate Channel should be closed to commercial fisheries and reserved for Haida food fisheries only
- Closures to protect Haida fisheries for groundfish and sockeye (Buck Point to Hunter Point, and Lawn Point to Sandspit need to be enforced and the latter should be extended to include Cumshewa Point
- Kagan Bay needs to be set aside for Haida use, especially for clams
- The prawn fishery in Trounce Inlet should be protected
- Areas should be set aside to allow abalone to recover.

3. Dixon Entrance

Summary of identified species and features:

Marine and Maritime Species: Salmon (coho, sockeye, spring, pink and chum), halibut, herring, lingcod, black cod, rockfish (yelloweye, black, Bocaccio, redbanded, canary, China, quillback, cabezon, short-spine thornyhead, greenling), Pacific cod, flounder (arrowtooth, starry), skate (big, longnose), steelhead, cutthroat trout, Dungeness crab, shrimp, prawn, clams (butter, littleneck, razor), abalone, scallop (purple-hinged rock, weathervane), mussel (blue, California), chiton (gumboot, black), sea urchin (red, green, purple), octopus, seaweed, kelp, Ancient murrelet (adults and eggs), seagull eggs, geese, ducks, seals (harbour, fur), deer, river otter, pine marten

Other Species of Note: Pacific saury, mackerel, needlefish, pilchards; nesting seabird colonies; shearwaters, fulmars, albatross; sea lion and seal rookeries; humpbacks, killer whales; incidental reports of sunfish, sea turtles, great white sharks

Traditional Settlements, Villages, Camps: *Daadans*, Henslung Cove, *Ts'aahl* (Egeria Bay), *Tiidldan*, *Yaak'u*, *K'yuusda* [Kiusta], *Kang* [Kung], *Sk'aawats* [Skaos], *Miiaa Kun* [Seven Mile/Wiah Point], Jalun River, Cape Naden, Jorey Point, Shag Rock; canneries: Tow Hill, Naden Harbour, Massett

Cultural/Historical: graveyard on beach at Fury Bay; tree burials near *Yaan*; burial site on Langara; many Haida place names and named fishing grounds documented; descriptions of landmarking fishing grounds

Haida Activities

“Well, from [Masset] as soon as ... the fishing season opens, they all go down to the North Island... all our people living here, they all had fishing cabins down there. So the whole village used to move down there. Nobody left here [in] Massett. They'd move down there, the hand-trollers, and then the other bunch moved into Naden—crab fishermen and their wives working the cannery. And then some from here—whatever left moved out to Tow Hill—razor clam digging. They had a big cannery out there that time. So Massett was empty town when it's summertime. Yeah, that was where I start fishing with my dad ... my dad used to teach me all about how to be on a rowboat—how to take care of the boat, how to take care of myself. He said, 'You're not a good ocean man unless you can stay on the boat.' (chuckling) ... Then once I got a little bit older I worked my way onto the seine boats. I been on seine boats, halibut boats—all of my life... I think I was twelve years old the first time I went by myself ... I rowed from here to Naden. I spent the night there and then from there I rowed down to Shag Rock. My dad was in the fishing camp there. There was a whole bunch of houses in there at that time. They had fishing cabins everywhere. [At] North Island... there was a big ... packer. They used to tie all the rowboats behind each others... and he used to tow everybody down there.” (Stephen Brown, Jan. 2009)

Seasonal movement patterns and activities throughout seascape unit

Within the Dixon Entrance Seascape Unit some of the main economic drivers in the 20th century have been the salmon and halibut fisheries, the North Beach razor clam fishery, and the Dungeness crab industry. Many traditional resource activities in this area correspond to the commercial industries that developed but span a significantly longer and more diverse history. They include: preserving salmon and halibut, drying edible seaweed, gathering *k'aaw*, shellfish and seabird eggs, and hunting marine and

maritime mammals. Many of these resource uses are tightly tied to the changing seasons; this is especially true for migratory species like salmon and waterfowl. Other marine resources are harvested year-round, weather permitting. These include some shellfish (e.g. octopus, razor clam, mussel, abalone, urchins, chitons, shrimp and crab), as well as groundfish species like halibut, snapper and lingcod. Some seasonal Haida fishing and gathering activities that were documented for this area are outlined below.

- **Spring** (Mar-May): Massett Haidas move to outlying areas to harvest herring and *k'aaw*, halibut, spring salmon, seaweed, and seabird eggs. This is also the start of the commercial razor clam harvest on North Beach. Seasonal villages or spring camps were located at many locations, including *Daadans*, *Miiaa Kun*, *Sk'aawats*, *Kang*, and Tow Hill; people still use many of these areas for fishing and gathering today. Once the Copper Bay sockeye run is finished, many Skidegate Haidas also come up the west coast to Langara and stay at Henslung Cove to fish primarily salmon and halibut. Other springtime resource uses in this area include intertidal shellfish harvesting; fishing crabs, shrimps, prawns, lingcod and rockfish; and gathering seagull eggs.
- **Summer** (Jun-Aug): Many Haidas used to spend the summer at trolling camps at North Island or on the north coast of Graham Island (e.g. *Tiidldan* in Parry Pass, Shag Rock, Pillar Rock, Wiah Point). There is also employment in canneries at this time of year. People fish and gather near traditional camp and village sites, but now tend to stay on their boats or return to Massett between trips. Springs, coho, pinks and sockeye are fished, for both food and commercial purposes. For home use, salmon is preserved by drying, smoking, canning or freezing. Halibut fishing takes place in many of the same areas, also some rockfish and lingcod fishing. Many types of shellfish are harvested, including octopus, chitons, urchins and mussels. Wild sea asparagus is picked.
- **Fall** (Sep-Nov): Commercial chum and coho fisheries continue and terminal food fisheries begin. Once the coho run is over, people traditionally return to Massett briefly, then may go up Masset Inlet or to Naden Harbour for in-river chum fishing. In the past, some people also travelled to gardens at Naden Harbour to harvest potatoes and other produce after they were finished at Langara. Shellfish gathering takes place in many shoreline areas, including clam harvests. Rockfish, halibut and lingcod are also fished. Hunting of migratory ducks and geese begins.
- **Winter** (Dec-Feb): Winter is traditionally a time for potlatching, feasting and story-telling. In the past, people would move back to Massett from seasonal camps in outlying areas or travel to trapping areas to spend the winter months there. Resource activities may include trapping mink, weasel, river otter, and marten, fishing halibut and rockfish, gathering shellfish, seal hunting, and in-river food fisheries for steelhead and trout. "Winter springs" are fished when weather is appropriate. Winter storms result in "wash-up" events on some north coast beaches, bringing many species of shellfish and even fish at times onto the shore for easy gathering.

"... after the fishing season is over ... the whole Haida people moved back here [to Massett], I think it's on September... and then... about thirty boats used to move to Naden... Sam Simpson did that cannery there... Haida used to move there in fall time, all winter... [at] *Sk'aawats* ... that's where the cannery was, *Sk'aawats*. Yeah ... they used to go for everything. Lots of people, they go to ...that river and then in Naden Harbour, they used to go up for dog salmons from there." (Wesley Bell, Mar. 2007)

Figure 17 depicts some of the main travel routes and seasonal movement patterns that were documented for Dixon Entrance during the HMTK Study.

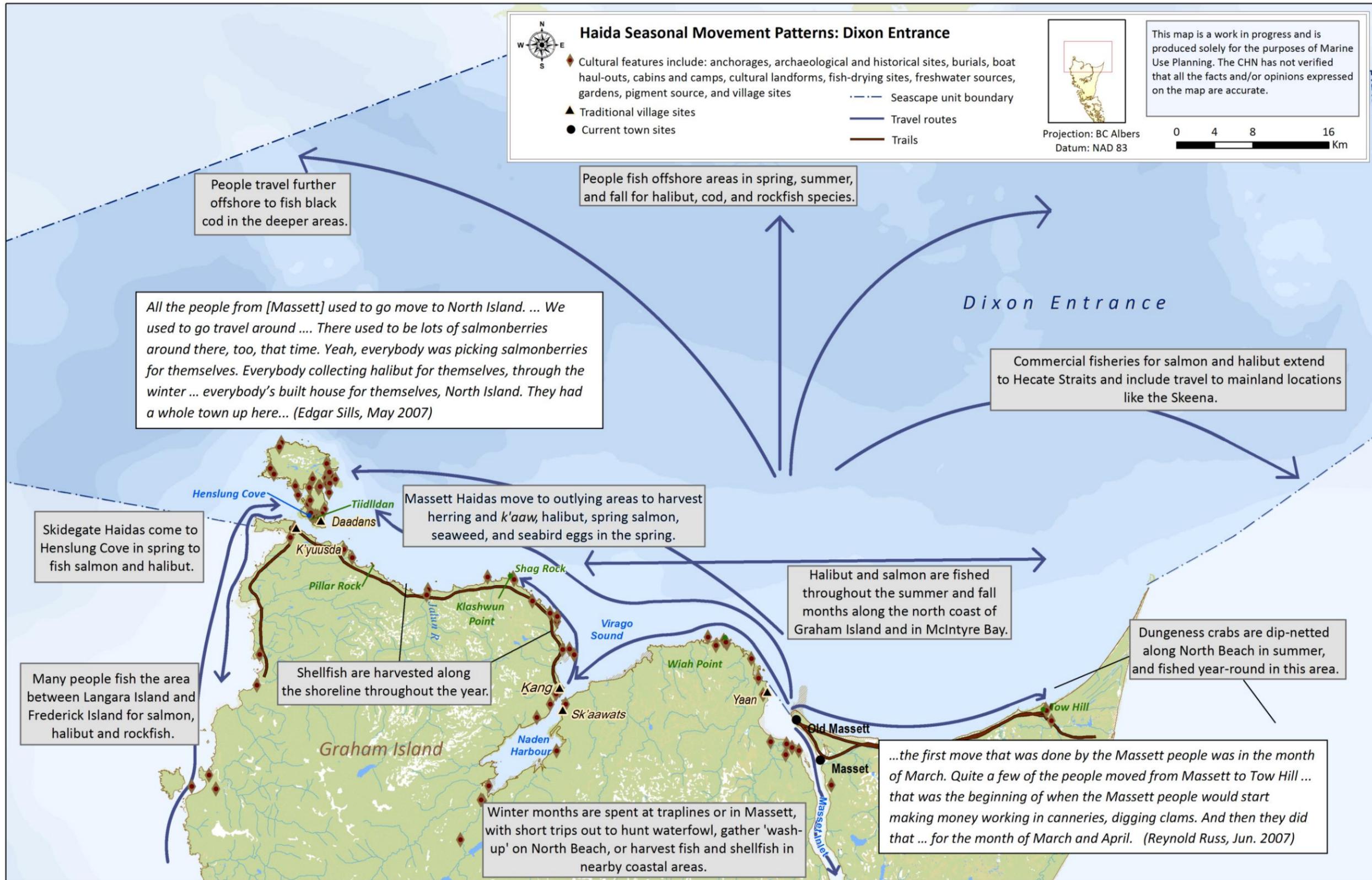


Figure 17: Map showing some key Haida seasonal movement patterns documented for Dixon Entrance.

Introduction to Key Resource Uses

It is within recent memory that Haidas moved to outlying camps and villages to harvest seasonal resources, often staying at places like Langara or North Island for weeks or months at a time. Commercial salmon fishing has been one of the economic activities driving resource use patterns in this area for decades. Many elders remember being taken out of school as children, to spend their springs and summers at trolling camps while their parents fished or worked in the salmon canneries. They would then return to Massett for the winter months, harvesting for the most part in areas closer to the village site.

In addition to salmon fishing, groundfish fisheries, as well as Dungeness crab and clam fisheries and the associated canneries that process the various catches have also functioned as economic mainstays in this area for many years.

...what they did was they had those double-ended rowboats, like I built out here, and they used to ring-fish crab in Naden. ... They'd sail them and row them and that was their commercial boats. In fact, they used to sail them out to Coho Point and you know, that's probably forty miles from Masset ...that's where they used to hand-troll with them. And Henry Geddes told me ... there used to be at one time between 200 and 300 of these boats at Langara and he said it was really something to see, because they used to all come ashore and stack their rowboats up side by side all along the beach. (John Bennett, May 2007)

Traditional resource activities, such as gathering seaweed and *k'aaw*, drying halibut, digging clams, and canning spring salmon, are usually done at the same time as these commercial activities.

Once canneries were relocated from outlying areas during the 1940s and 1950s, people generally began to spend less time living in seasonal camps and more of the year in Old Massett. Over the same time period, some of the once-predominant commercial resource activities also underwent significant change. Fleet reductions and increasing restrictions impacted the salmon fisheries; herring declines impacted some *k'aaw* fisheries; and new shellfish fisheries emerged for geoducks and sea urchins. Nonetheless, many of the traditional movement patterns and harvesting locations established generations ago are still in use today. Salmon and halibut fisheries continue to figure importantly both in the regional economy and the local diet. Another economic driver in this seascape unit is the razor clam fishery. The Council of the Haida Nation co-manages this fishery with Canada's Department of Fisheries and Oceans. Almost all the participants in this fishery are Haida, and it provides important employment and benefits to the community.

The Dungeness crab fishery is also an important source of local employment and income in Dixon Entrance, and an important traditional food. There is good seaweed and a diversity of shellfish to be harvested in many areas, as well as many species of cod and rockfish. In addition, Dixon Entrance provides valuable habitats for nesting and migratory seabirds, some of which have been important food sources for Haidas.

Because of the varied habitats, ocean conditions and ecosystem types encompassed by the Dixon Entrance seascape unit, as well as proximity to the Massett townsites, resource use is extremely varied here. Approximately 60 different species were reported to be harvested on a regular basis in this area. More detailed information on select species can be found in the relevant sections of the ***Focal Species Summary (HMTK Volume 3)***.

Current Issues and Concerns

The prevailing trends noted for this seascape unit involve declines – most observations are about salmon, and include declines in both abundance and size for some species. Herring populations have also decreased in this area. There are observations that some species of groundfish may be suffering the impacts of overharvesting, especially those in proximity to recreational fishing lodges. As in many other areas, current abalone abundances are much reduced from past levels. Several other localized shellfish declines were noted, specifically at sites that have been overharvested or are located near sewage outfalls. One elder observed that wind and weather patterns in this part of Haida Gwaii have changed during his lifetime; Stephen Brown said that when he was young, it used to be so calm around Langara that people could fish every day (Jan. 2009). The weather is said to be less predictable and less calm now, sometimes making it more difficult to fish.

The topic of greatest concern within this seascape unit is the impact of the commercial recreational fishing sector. Some of the declines outlined above are believed to be attributable to sports fishing, at least in part. Five topics of concern identified for this seascape unit are summarized here.

Salmon Fisheries

While some study participants stated that most if not all marine species on Haida Gwaii have suffered from the effects of overfishing in recent decades, one of the most contentious issues in the Dixon Entrance seascape unit has to be the management of salmon – species critically important to both food and commercial fisheries. Many areas in Dixon Entrance have been important for Haida salmon fishing, whether it's the seine and troll fisheries of migratory runs, or terminal gillnet fisheries closer to river mouths. Langara Island is one such hotspot; fish migrating down from Alaska “split” around Langara on their way to spawning areas. There have historically been very high abundances of salmon around Langara and along the north coast of Graham Island. Most species of salmon are found in abundance off Cohoe Point, a traditional Haida fishing site; “It’s a fantastic place for fishing,” (John Bennett, May 2007); “Cohoe Point is where they fish everything,” (Rolly Williams, Mar. 2007). Attesting to the importance of this area, the remains of cabins are still visible in traditional Haida settlements such as *Daadans* and Henslung Cove. Seasonal fish camps, usually for both salmon and halibut, were also located on Langara at Cohoe Point, Andrews Point, and West Point.

Apart from its location on the salmon “migration route”, part of the ecological importance of the Langara area is likely

“The whole top end at times has a lot of herring and quite a bit of needlefish...” (Willie Davies, Mar. 2009)

the abundance and consistency of feed that has historically been found there. Needlefish – important food for coho – used to be seen in very high numbers around Cohoe Point and McPherson Point during the summer months. High numbers of forage fish are also seen around Klashwun Point until the end of September. During the salmon fishing season, camps or fish-buying scows would set up in some of these locations, such as Wiah Point, Shag Rock and Naden Harbour. Pinks, sockeye, coho and springs are fished throughout Dixon Entrance off many of these points, while chum are mostly fished around Langara and Naden Harbour. It is likely that attractive food and habitat are available to salmon in Dixon Entrance for many months of the year, as “winter springs” are caught in numerous areas.

Salmon observations and fishing areas documented for Dixon Entrance are shown in Figure 18, with an indication of frequency or intensity of use.

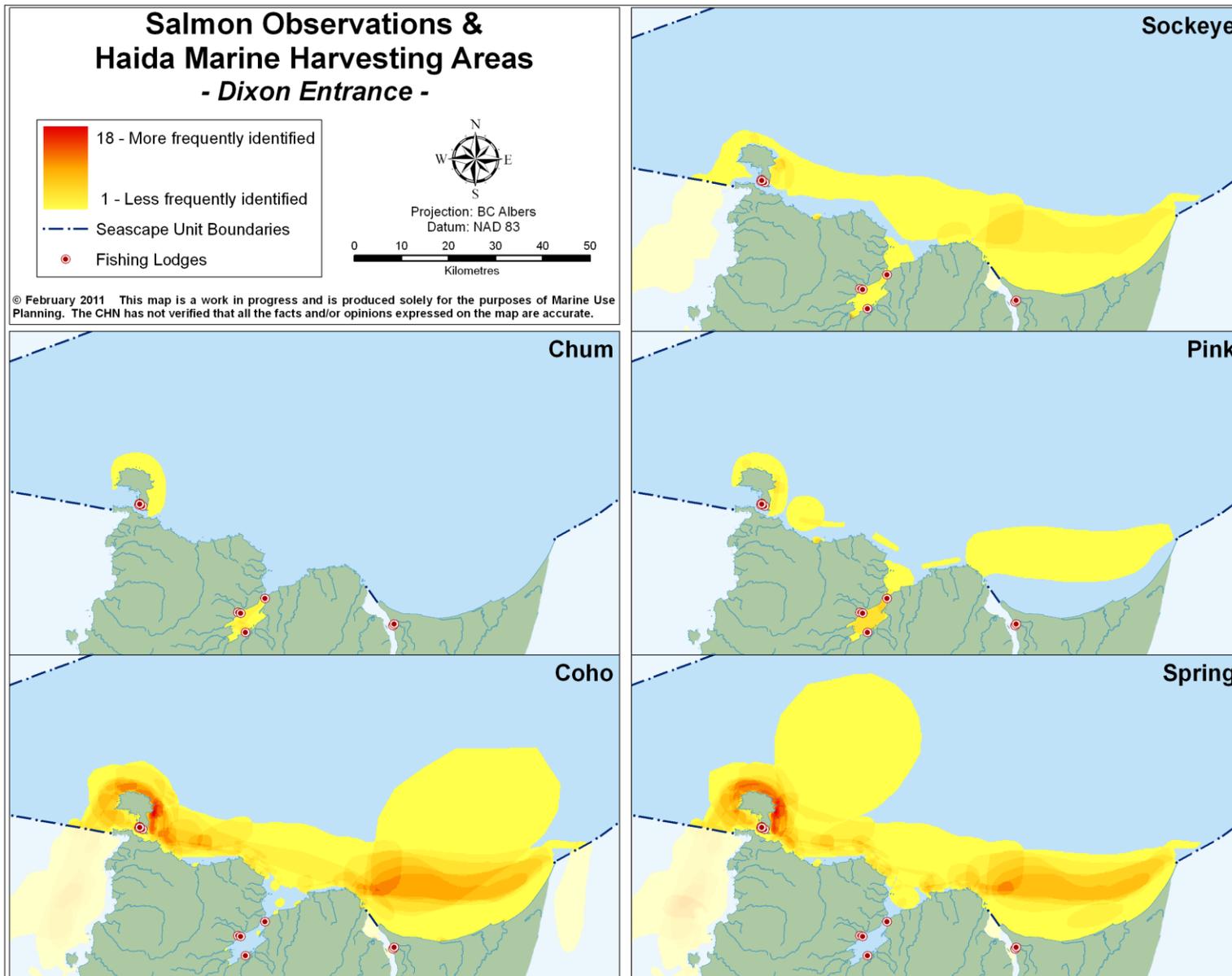


Figure 18: Map of salmon observations and harvesting areas documented for Dixon Entrance.

Fishermen now report that many historically strong salmon stocks and fisheries have been declining in Dixon Entrance, possibly since the 1960s. Pink and chum numbers are reported to be consistently lower than past levels. Springs and cohos have also declined.

There's been quite a bit of changes out there. Like I say...for commercial fishing, we would get out on the fishing ground 4 o'clock in the morning... as soon as we get enough spring salmon and cohos, we'd quit and start working on our fish... in them days there, by 2 o'clock you've got more than enough fish to work on. But nowadays you've got to fish at least 2 days to get enough for what we used to catch within 5 hours. (Willie Russ Jr., Mar. 2009)

Jalun River was noted as one location that used to have really good runs of coho. Coho numbers in general were said to be depressed; numbers and catches are much lower than in the past. Other salmon runs and areas that were said to be very productive in the past but have declined now are: sockeye at Tow Hill, spring salmon at West (Langara) Point, and springs at Pillar Rock.

Some salmon declines are attributed to habitat destruction or increased seal predation, but commercial recreational fisheries are perceived as the biggest threat to traditional salmon fisheries. Many Haidas are unhappy with the practice of catch and release. Coho often don't seem to survive catch and release in sport fisheries or commercial release from trollers. A related concern is the practice of "playing out" big springs before they are released, leaving them vulnerable to predation.

The thing that saddened me most is the sports fishermen play with that big spring salmon... After they catch a salmon, they just play with it and reel it in then it takes off full-bore, it gets weaker and weaker and weaker. When they stop fighting then they unhook it; they just let it go. And them things are so close to death they pop up like that. They float on top of the water, belly-up. It's sad to see them things when you go out there close to the fishing area. You'll see big spring salmon floating here and there. So either the birds get it or a sea lion gets it, or a seal ... they don't live after they do that to them. And every year they kill thousands of them like that. And yet if we caught one in the river in a net, they make you let it go; you have to let it go. ... Our way of life is you get enough to live on and that's it. (Stephen Brown, May 2007)

The scale of today's sports fishery is also a concern for many Haidas. With the continued expansion of lodges in the north end, many now refer to this sector as a "commercial sport" fishery.

...'87 I started trolling at Langara, commercially, and it was by 1990 that we were red-lined out of there by the commercial sport sector. And to this day, commercial fishermen are still red-lined out of there. Like, we'd fish right along the beaches... but now we're red-lined out ... So all those areas that are historic to all the Haida commercial fishermen ... no longer exists. Right from... Langara right to Tow Hill... And now the commercial sport at Langara makes you feel guilty for going down into those traditional areas. (Oliver Bell, May 2007)

"I think there's a decrease [in salmon] ... it's almost like I feel like I've seen the end of just about everything. I've seen the end of all the old Haida fishermen..." (Oliver Bell, May 2007)

Fishing restrictions have changed to accommodate these increasing pressures. Many Haidas now feel that they are being squeezed out of what is a traditional resource activity, as competition from recreational fisheries increases.

The sports fishing took over the ... commercial fishing of transient stocks. We used to fish Langara. It's kind of sad in a way because... my grandfather fished it, and my father fished it, and I fished it, and my son fished it, but there's no chance for my son to go out there and seine anymore, eh? There's generations of seining got shut down with the sports fishing. (Monte Stewart-Burton, May 2007)

Some specific suggestions for addressing these problems are included in the *Issues Summary and Stewardship Suggestions* at the end of this section.

Groundfish Populations

In addition to these issues involving salmon stocks, sports fisheries in the Dixon Entrance area are also seen to be affecting groundfish populations. Some participants said that they see the biggest impacts in proximity to the sport fishing lodges, and that rockfish and even halibut have declined in these areas.

I think that's coming back to haunt these guys at the lodges now. Like last year was a really poor year down there. They targeted... halibut so bad last year that they finally closed the halibut... to sports fishing. So they took... more than their quota of what they're supposed to ... when they don't get one type of fish, like there are no salmon—which there wasn't that much—then they target something else. You don't have the lingcod, little black bass and stuff like that around Langara like there used to be, eh? They take all those kind of fish. They are only allowed to fish salmon for you know, so long and then they've got to go and fish other types of fish... each person that comes in, and they can fish a bit of halibut and rock cod and salmon through ... the time they're there ... and ... any of the cod are really slow growing fish, eh? (Henry Hageman, Mar. 2009)

While not mentioned as often as the salmon issues, halibut and lingcod declines are of some concern in this area. The numbers of large fish seem to be declining in particular.

Yeah, around [Egeria Bay and Parry Pass]...used to be grey whales and...big halibut. (chuckles) Oh, there was big ones there! [We caught them] right around here, right close to the shoreline; it's so deep there. ... They're so big down there, you've got to use salmon guts for bait. Yep, that's the best for halibut down there. (Kelly Jones, May 2007)



Halibut are fished throughout Dixon Entrance, the specific areas changing with the time of year and available feed. For example, in the spring, halibut tend to follow herring into shallow areas. They will also follow and feed on pink salmon, and are at times found with bellies full of dogfish. One halibut feeding behaviour that may be unique to this area is the biting off of razor clam siphons. Numerous participants reported halibut stomachs full of the siphons when the fish are caught during the summer months.

“...[we start fishing] in June when the halibut is starting to move around. And then it's good for the rest of the year until maybe around...September. And then the halibut start moving out into the deep again...but you get the odd halibut all the time out there.” (Revnold Russ,

... when you're fishing down towards Tow Hill along the beach there, from around May and June when we'd go down there fishing in the shallows. [The halibut would] be full of clam necks, about an inch long. Because in the warm weather, the razor clams, they'll stick their necks out of the ground. They just go by and snip them off like scissors. (Henry Hageman, Mar. 2009)

Food sources such as this might be a factor in the halibut "rearing" or breeding areas identified in Naden Harbour and from Seven Mile to Tow Hill, where there are consistently high numbers of young or "chicken" halibut found.

Rockfish and lingcod tend to be associated with kelp patches along the coastline, especially from Striae Island to Wiah Point. Red snapper or yelloweye – a popular food fish – is found in especially high abundances off some Langara shores, such as West Point and McPherson Point; "That's one of the best areas I've ever seen for red snapper," (Claude Jones, May 2007). One participant felt that rockfish populations are not declining, but seem to be steady or even increasing in the areas he fishes.

Whether discussing salmon or groundfish, finfish abundances can also be affected by environmental factors such as changes in temperature or the impact a lack of available feed has on stocks.

... years back you've just got to get one good spot and you can get all the halibut you need. But now you get three, four and that's it. You don't get a boatload like we used to years ago. So it's quite a bit different. ... I always think it's got a lot to do with the temperature of that water. Like out here... about three years ago I guess—the water temperature came right up ... to fourteen ...and that's way too warm for fish. So not long after that, we went back out there to fish and we never got one halibut. They all moved out in the deep, I guess. It was like that for a whole month. Every now and then we'd go back there and check it out and nothing there. All of a sudden they start moving back in again. So I think the water temperature's got lots to do with that. And I think another thing that got lots to do with [it is] what they feed on. (Stephen Brown, Feb. 2009)

Despite observations that forage fish populations have historically been strong in this area, over the last 50 years herring abundances have declined dramatically throughout Dixon Entrance. Before the 1960s, there used to be a lot more herring at Andrews Point, Shag Rock, Cape Edenshaw, and outside Naden Harbour and Jalun River. There was also said to be more herring around Langara than anywhere else in the north end at one time. They were reputed to be the fattest and the best herring to use for bait. It is possible that this reduction in feed is impacting some groundfish species and salmon.

Herring spawn in just a few Dixon Entrance locations that have been negatively affected by fishing. Herring declines have been noted at Naden Harbour; "Historically, their stocks in their small isolated areas have never grown. You know... they sustain their certain level. And after they started fishing them... they almost wiped them out. There's hardly any ...spawn activity there now," (Percy Williams, Aug. 1998). In the past, the herring spawn would start at Naden, then down the west coast. Today's spawns are much reduced in both size and extent. Maps showing herring areas are included in the relevant chapter of **Volume 3**.

Halibut observations and fishing areas are shown in Figure 19 on the next page; rockfish, lingcod and several other groundfish species are included on this map, as they are in many of the same areas identified for halibut.

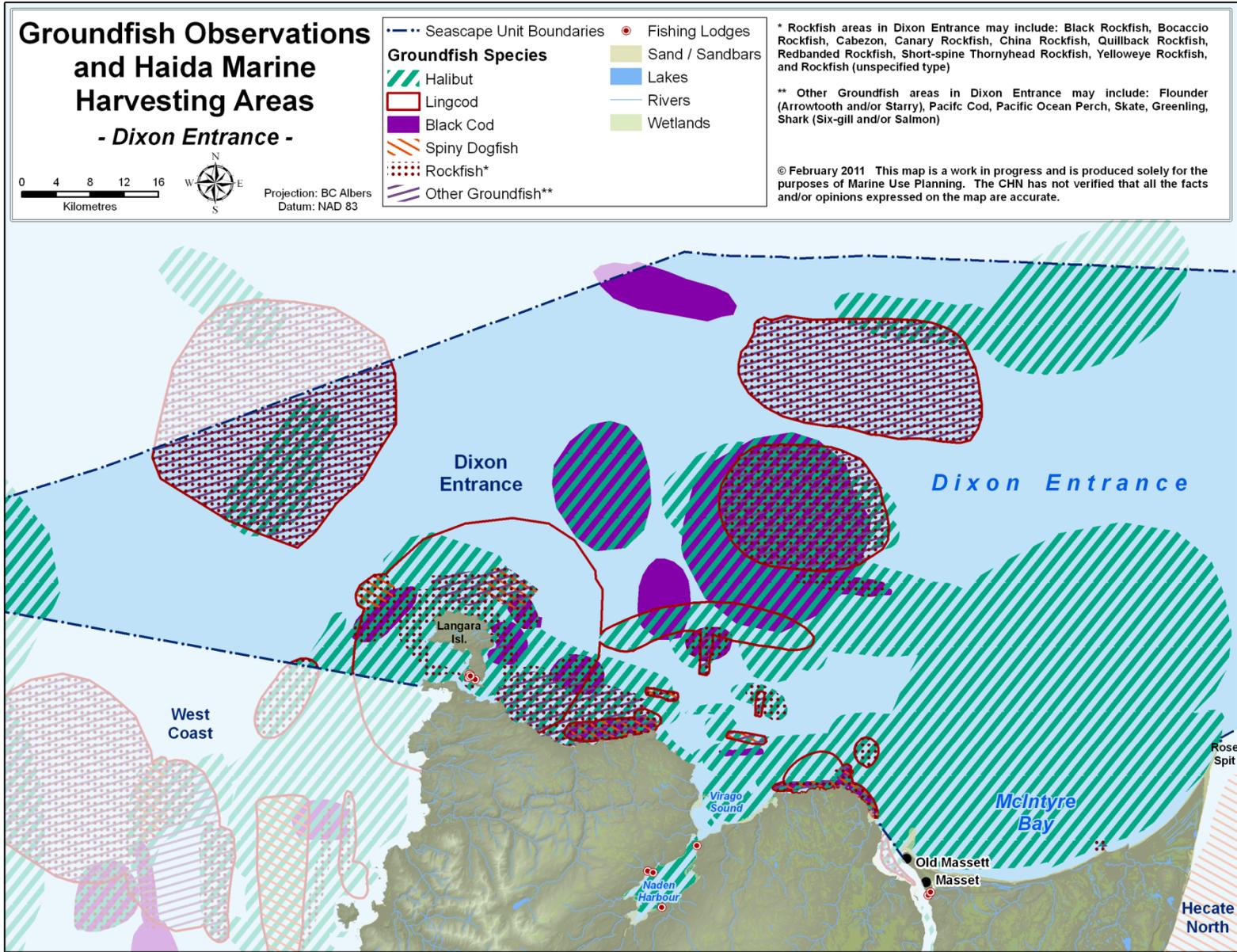


Figure 19: Groundfish observations and harvesting areas documented for Dixon Entrance.

Shellfish Declines

Some of the trends noted here are not restricted to Dixon Entrance, but widespread and observed throughout Haida Gwaii; abalone is one such example. Abalone were formerly abundant and harvested in many areas in this seascape unit. It is felt that poaching continues to deplete their populations, and that the large catches taken in past commercial fisheries have impacted populations enough that they have not recovered; “I think from after they commercialized everything, we’ve lost all our abalone,” (Margaret Edgars, May 2007). Additional impacts affecting Haida harvesting of abalone were attributed to the commercial sports sector.

...there used to be... an abalone bed here, off [location] here. We used to gather for food and what happened was when these fishing lodges got in there... DFO ... said that because of the pollution that these things were causing that you couldn’t gather any food in there anymore so... now you can’t gather anything in there... it’s been like that for pretty well since the sports fishermen got in there, those fishing lodges... used to dump their sewage... right into Parry Pass... (John Bennett, May 2007)

“We used to get lots of butter clams in Naden, but they wrecked it. The big ...logging boats wrecked it. There used to be a sandbar right across from the island and they pushed it away. No more butter clams now.” (Edgar Sills, May 2007)

Other shellfish declines noted for this area are often attributed to specific environmental impacts, industrial activities, or developments occurring within Dixon Entrance. For example, there are local depletions of shellfish near the Massett townsite and some fishing lodges; most are blamed on sewage outfalls or overharvesting. In addition, chitons are observed to have declined around Entry Point and

North Beach; this area was formerly very productive, “... from Entry Point to Chown Point, about half-way out, you could get a lot of seafood – anything you want,” (Reynold Russ, Jul. 2007). Clam beds in Naden Harbour are no longer productive; and Pillar Bay is described as “dead” – even crab populations have declined here.

Still, shellfish harvesting is extremely important in Dixon Entrance. The species harvested most often for food include clams and cockles, crabs, chitons, sea urchins, octopus and scallops. Close to two dozen shellfish species may be harvested in this area. Shellfish observations and harvesting areas documented for Dixon Entrance are shown in Figure 20. Many of the shellfish harvesting areas shown in this figure are also places where edible seaweed is picked. Langara and Parry Passage in particular were mentioned as having very good and abundant seaweed; “The most seaweed I ever saw was at North Island,” (Percy Williams, Oct. 2008). While there were some observations that seaweed timing may be changing, no other trends were noted, but there are some concerns about non-Haidas harvesting this traditional food (see **Volume 3**).

“... the best place we used to get chitons from was from down Langara, eh? Because they’re big ones. They’re real clean too there. Didn’t have to really wash them, but I used to wash them in freshwater to shine them up And then you cook it just the way it is. ... You get them same time as the... seaweed. ... You get real good ones, good seaweed, down Langara. And you get a lot of chitons there; you get those big red ones too ... they’re kind of sweet; got a sweet taste to it, eh? The way mum used to clean it was dad would build a fire outside... and he just used to throw the whole thing into the fire... let the skin burn off. And then you just scrape the black part off.” (Willie Russ Jr., Mar. 2009)

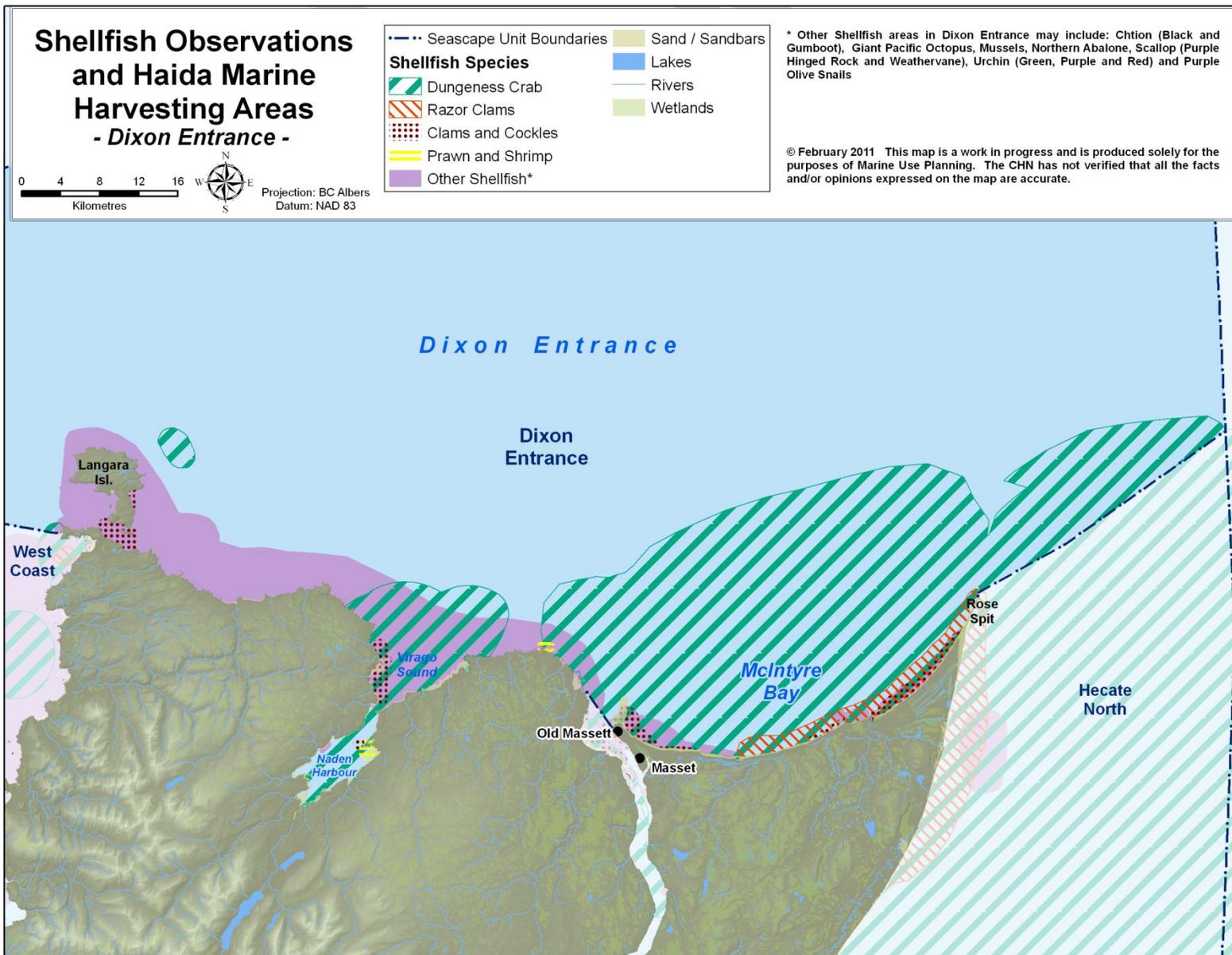
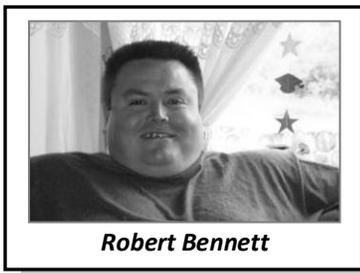


Figure 20: Shellfish observations and harvesting areas documented for Dixon Entrance.

Figure 20 indicates the extent of the Dungeness crab fishery within Dixon Entrance. Because this fishery is so important the Massett Haidas, declines in Dungeness crab populations are likely second only to the salmon fisheries issues in regards to overall concerns for this seascape unit. Once again, recreational fisheries are identified as having an impact. Naden Harbour is a traditional crab fishing area that people are very concerned about; “Naden Harbour used to have commercial openings in there for ring fishing... but with the lodges being in there ...they fish crabs there year-round ...so it’s eventually getting wiped out now too,” (Oliver Bell, Dec. 2008). There is an additional concern about current commercial crab fisheries; “... there’s too many big boats going in there now. There used to be lots of crabs in there. Now the crab boats go in there with a hundred rings and fish it out in no time,” (Vern Williams, Jan. 2008). There is reportedly a similar situation in Virago Sound.

North Beach is another traditional crab fishing location where recreational fisheries are contentious. There is concern that people may be impacting the population by taking crabs during their moulting and mating season; “Those guys are pulling them apart while they’re mating. That’s when they’re dip-netting



them... is when they come on the beach to mate, and they’re ripping them all apart and the females are washed up on the beach,” (Robert Bennett, Dec. 2008). Controlling access to the beach and educating recreational fishers were two suggestions to address this problem. A further issue raised in regards to the Dungeness crab populations is the proposed Naikun windfarm development. There is concern that the windfarm could negatively impact crabs and/or crab fisheries near Rose Spit.

Nesting Seabird Populations

At one time, Langara Island had some of the highest densities of nesting Ancient murrelets or *sgidaana* in the province. Collecting the eggs and harvesting the adults is a fond memory of many Haida elders. In more recent times, the Ancient murrelet population has suffered a number of different impacts, including the introduction of predators to the island (despite a rat eradication program in 1995) and the construction of a sports fishing lodge over an important nesting area. Few *sgidaana* or their eggs are harvested here anymore.

“At the top of this hill here it looks like a city. That’s where all the West Coast Fishing Club is. It’s cleared off so much now ... when you’re around the outside here you can ... start to see the houses there now. And that used to be a lot of *sgidaana*, used to nest on there. This whole area on the top, all over; there’s nothing there now.” (Henry Hageman, May 2007)

In addition to Ancient murrelets, the coastlines and islands in Dixon Entrance are home to many other nesting seabirds and migratory waterfowl. Other Haida uses of seabirds include hunting shorebirds, ducks and geese, as well as gathering their eggs. We have included these uses when they were recorded for marine areas, such as on shorelines and in estuaries. While duck and goose hunting may also be an inland activity, it was not generally documented as part of this marine study and no other terrestrial results are presented here. There are numerous important feeding areas located on migratory birds’ flyways in Dixon Entrance. Fishermen often observe very high densities of albatross, shearwaters, and fulmars in areas between Seven Mile and Langara, as well as west of Parry Passage. No concerns for any seabird species other than Ancient murrelets were documented during the interviews. It should be noted however that seabird observations and harvesting was a topic that was not well-covered during the interviews and as a result, seabird areas are likely under-represented in the spatial results. Figure 21 shows some seabird nesting observations and harvesting areas identified for Dixon Entrance. Due to the

scale of map used during the interviews, polygons showing Ancient murrelet harvesting extend further offshore than would otherwise be expected. As a result, the spatial data for murrelets was trimmed to the 5m contour where possible, to better represent harvesting areas. Further information on seabirds is included in the *Seabirds* chapter of *HMTK Volume 3: Focal Species Summary*.

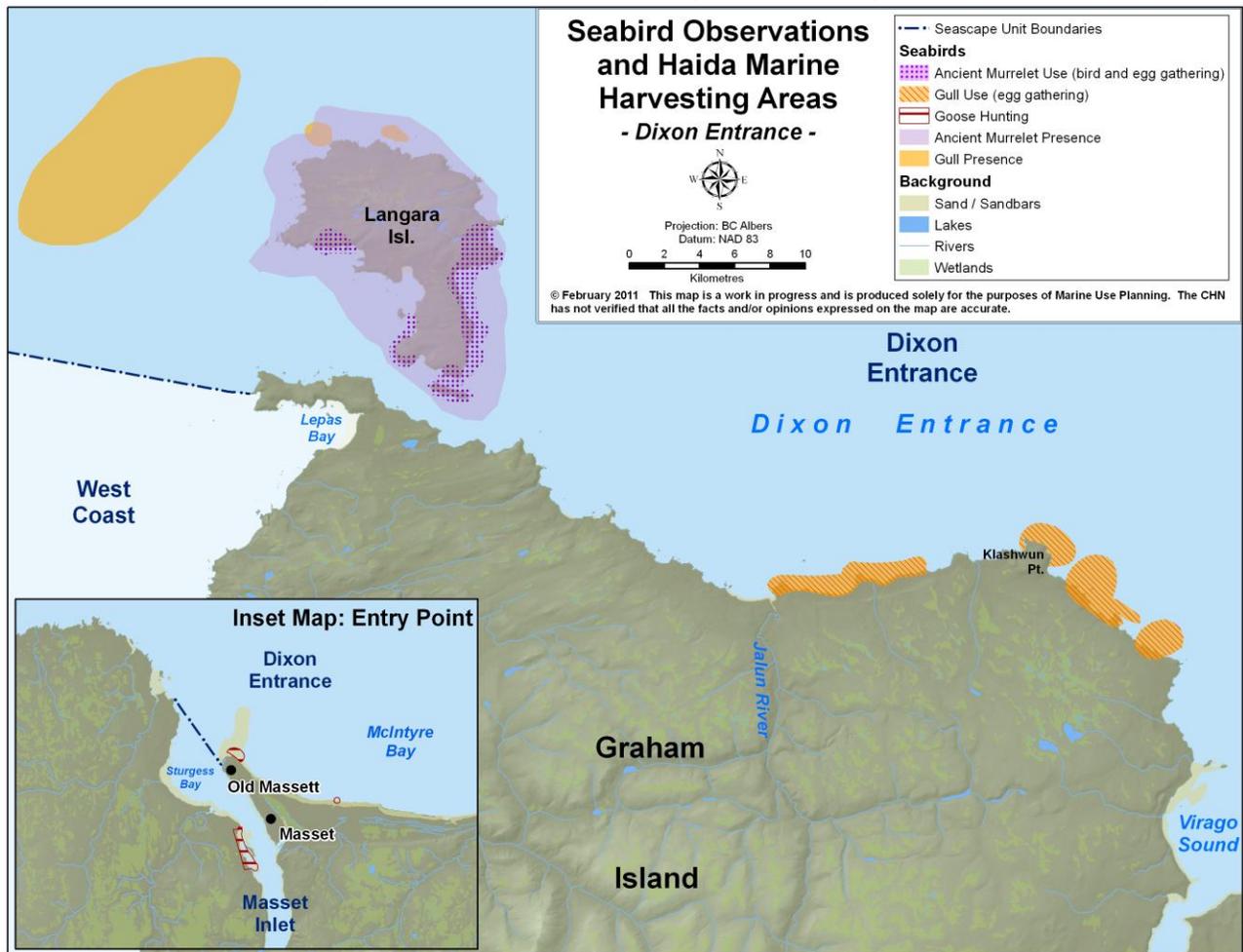


Figure 21: Nesting seabird observations and harvesting areas documented for Dixon Entrance.

Marine Mammals

The abundant feed in Dixon Entrance attracts not only migratory seabirds but numerous species of marine mammals. The area encompasses a number of important seal and sea lion rookeries; Sea Lion Rocks, Striae Island, Hidden Island and Rose Spit were some of the areas mentioned as having high densities of these marine mammals, haul-outs or rookeries. There are observations that some of these species may be increasing in some areas of Haida Gwaii, and fishermen are concerned about their potential impact as predators. There are also several species of whales that are seen in Dixon Entrance, at least for part of the year. Humpbacks arrive in April and May to mate and feed in the area; they then move north or into deeper water before the killer whales arrive. Killer whales may stay in the area all summer. Some people report more killer whales in recent years in addition to more aggressive behaviour, as the whales increasingly take fish off fishing lines.

While few people harvest marine mammals today, there is evidence that many species were used with greater frequency in previous generations. Some Haidas still hunt harbour seals for their meat and oil,

however we only documented one record of whale use in living memory. Interestingly, there was a large fur seal polygon mapped in Dixon Entrance. One participant told us that when the fur seals migrate through in March, Haidas used to paddle out to this area to hunt them, often spending the night in their canoes. Once again, it is important to stress that this topic was not prevalent in the interviews, and because the spatial results likely under-represent both the distribution of marine mammals as well as Haida uses they have not been included here.

Issues Summary and Stewardship Suggestions

For the participants in this study, the most pressing concerns regarding the marine environment and resources of the Dixon Entrance Seascape Unit center on the impacts of the commercial recreational fisheries. Concerns span various aspects of sports fishing developments, including the siting of lodges on ecologically or culturally sensitive areas; inadequate handling and disposal of sewage; overharvesting of shellfish in proximity to lodges; unrecorded salmon mortalities due to catch and release; and the impacts of overfishing on groundfish species. The steady expansion of this industry is also perceived to be excluding Haidas from many of their traditional fishing areas.

“It’s sad the way they have all these lodges taking over all our areas out there. It’s really hard for me. Especially when they built right over the caves, that area where our elders are buried.”
(Margaret Edgars, May 2007)

“Where Rediscovery is, that’s got to be preserved for future at all times. ... Langara should also be preserved, and it’s so hard to deal with because they’ve got the sports fishermen in there. And ... Naden Harbour. There won’t even be any more crabs in there the way the sports fishermen are in there. ... Where the crabs are. ... These should be all preserved, even the beach area... because crabs go in the beach to [moult]... I think it’s in June, July. Right after they dipnet. That’s when they go up and the crabs are all the way close to shore in June and July. I think that’s one of the reasons why the crab season is so poor, because of the ones that go dipping for the crabs... in the whole Tow Hill area.” (Margaret Edgars, May 2007).

Within Dixon Entrance, Langara Island and Naden Harbour were the areas suggested most often as needing some level of protection; they both include important traditional resource harvesting areas and cultural sites. It was suggested that the Naden Harbour crab fishery be shut down to all commercial and recreational fishing, so that only a Haida food fishery is allowed in that area.

There is also a broader concern that an increased level of protection or a different approach to management is necessary in many coastal areas, as this is where the sports lodges tend to be built; “I think all the shoreline coasts [need protection], especially where the lodges are now because they’re taking everything. They’re all up to Langara Island where there used to be such an abundance amount of

everything and now there’s nothing there,” (Oliver Bell, Dec. 2008). Efforts to protect shoreline areas would likely have the added benefit of preserving seaweed gathering areas or at least limiting illegal harvests.

While there are generally fewer issues raised around the commercial fisheries that operate in this area, there was an observation that the turbot draggers working off Jalun River are likely harming halibut. It was suggested that excluding this type of fishery between Langara and Rose Spit would help to protect the juvenile halibut that tend to be found here. On the other hand, there are concerns about protecting the fisheries that extend from Massett down the west coast; “... I would say that’s the most important,

like right from Massett ... out to the outside of Langara and you know almost down to Frederick there where guys go. That's probably pretty important," (Conrad Collinson, Oct. 2008).

One additional marine resource issue was raised for Dixon Entrance during the Old Massett verification sessions: people are concerned that non-Haidas are harvesting seaweed in many traditional gathering sites, and that they may be causing damage (Margaret Edgars, Jun. 2010). There was also discussion around the possibility that seaweed is being impacted by sewage coming from sports fishing lodges in the area.

Some of the specific stewardship suggestions for this area are:

- Introduce minimum size limits on halibut caught in the recreational fishery
- Eliminate catch and release of all fish species
- Consider limited entry for the recreational fishery
- Obtain information on numbers of guests at each lodge and use these numbers to estimate how many fish are being caught or have catches reported to Haida Fisheries Program
- Haidas need to introduce and enforce limits on the sports fishery total catch
- Haidas need to practice sustainable food fishing to set a high standard and show responsible stewardship
- Control recreational dip-net fishery of mating crabs on north coast.

4. Hecate North and South

Summary of identified species and features:

Marine and Maritime Species: Salmon (coho, sockeye, spring, pink and chum), cutthroat trout, Dolly Varden char, steelhead, herring, halibut, lingcod, Pacific cod, sablefish (black cod), flounder, skate (big, longnose), rockfish (yelloweye, greenling, canary, quillback, tiger, China), dogfish shark, ratfish, abalone, clams (littleneck, butter, razor, geoduck), cockle, purple-hinged rock scallop, mussel, chiton (gumboot, black), red sea urchin, octopus, squid, shrimp, spot prawn, crab (Dungeness, box), sea cucumber, gooseneck barnacle, red turban snails, Ancient murrelet (adults and eggs), seagull eggs, oystercatchers, geese, ducks (mallards), seaweed, kelp, wild sea asparagus, deer, harbour seal, river otter, pine marten

Other Species/Topics of Note: herring spawn and needlefish; nesting seabirds; humpbacks, killer whales, sperm whales; seals and sea lion haul-outs; incidental reports of basking shark

Traditional Settlements, Villages, Camps: *Nee Kun* [Rose Spit], *Tllaal* [Tlell], Lawn Point, *K'aasda* [Copper Bay], Gray Bay, *Hlkinul* [Cumshewa], *K'uuna* [Skedans], Lagoon Inlet, Pacofi, Sewell Inlet

Cultural/Historical/Other: fish weirs at Chadsey Ck; locally-named fishing grounds (Overfalls, Eagle Hill Grounds, Twelve Mile Grounds, Six Mile Grounds, Cape Ball Grounds, The Fingers, Horseshoe, the Hump); hatchery at Pallant Ck; canneries – Pacofi, Lagoon Bay; story locations – Dog Rocks, Copper Bay

Haida Activities

“That’s where everybody used to come to get their *k’aaw* [Selwyn Inlet] ... Yeah, Black Market Bluff! (laughing) That’s what I always nicknamed it. But everybody used to work along here. And all along in these little bays here? That’s where we used to get our clams. ... Halibut all around in these reefs here ... guys used to jig around in there and set those drop lines ... then all through here you just fish the shelf with prawn traps and you get prawns. ... And then out all around Reef [Island]—anywhere around Reef—is good for halibut and cod. ... A lot of people go out there for... food, yeah. Commercial goes on there, too. ... A lot of snappers ... we usually jig in there, set little drop lines. That’s pretty well all the areas that we’d go to, when we were fishing around there. ... Everybody’s got different spots.”

(Conrad Collinson, Oct. 2008)

Seasonal movement patterns and activities throughout seascape unit

Typically more sheltered than the West Coast, the East Coast of Haida Gwaii is frequented by many Haidas, throughout the year, for a wide variety of food and commercial fisheries. Access to fishing and gathering areas is generally facilitated by more moderate weather and ocean conditions, as well as proximity to Skidegate Village and some road development. South of Skidegate Inlet, early spring resource use patterns center largely on herring and *k’aaw*. The sockeye food fishery at Copper Bay or *K'aasda* is also of critical importance in the spring months. In the summer and fall, there are many areas for fishing salmon and halibut throughout the east coast and out into Hecate Strait. Nearshore areas contain abundant resources that are harvested for food many months of the year, such as clams, abalone, crab, octopus, lingcod and halibut. Some fishing activities extend to the very southern extent of Haida Gwaii, for species such as black cod, halibut and herring. Because there is some resource use continuity between the Hecate North and South seascape units, we have included discussions for both

here. Further details on the southern regions' resources can also be found in the Gwaii Haanas and West Coast sections.

North of Skidegate Inlet, the ocean environment differs significantly from the more southerly areas. Here, the two main commercial fisheries are for Dungeness crab and halibut – both dictated less by season than many other resources. This area is also important in the commercial dogfish fisheries. Closer to shore, many Haidas frequent the area from Lawn Point to Tlell, year-round, for a variety of shellfish species, and some groundfish. A brief description of some of the more common seasonal movement patterns and main Haida resource harvesting activities for this area is given below.

- **Spring** (Mar-May): Skidegate Haidas move south to Cumshewa, Selwyn and Sewell Inlet to fish herring and harvest *k'aaw*. Gathering black seaweed also occurs about this time. Sockeye run in Copper Bay from early March to mid-June. People used to spend the month of May food-fishing, canning and making *ts'iljii*; most now do weekend trips out to Copper Bay from Skidegate. While at Copper Bay, people may also gather shellfish like clams, cockles, mussels, octopus and snails. May is a good time to gather gull eggs as well as Ancient murrelets and their eggs – Limestone Island is one traditional *sk'in xaana* harvesting site. Spring salmon, rockfish and lingcod may also be fished while waiting for the herring to spawn. Some Massett Haidas harvest razor clams at East Beach, south of Rose Spit. Dungeness crab and halibut are fished throughout Dogfish Banks and Hecate Strait.
- **Summer** (Jun-Aug): Salmon fishing dominates the summer months. Once the Copper Bay sockeye run is finished, many Skidegate Haidas move up the west coast to places like Nesto or Langara to fish salmon and halibut there. Others stay closer to home and fish springs, coho and halibut along the east coast and in Hecate Strait. In July commercial coho, pink and chum fisheries start on the east coast of Moresby Island. People that moved up to Langara to fish there now return to the southern area to start fishing pink salmon. In the past, summer work was found at local and mainland canneries. Salmon and halibut are preserved for home use by drying, smoking, canning or freezing. Groundfish and shellfish are harvested for fresh food in many areas. Commercial fisheries for Dungeness crab and halibut are busiest at this time of year. Some people harvest wild sea asparagus at the mouth of the Tlell River and Copper Bay.
- **Fall** (Sep-Nov): Coho and chum fisheries dominate resource activities at this time of year; they are important to a variety of both food and commercial fisheries. There is still a lot of shellfish harvesting and fishing for species such as halibut, cod and rockfish. The Dungeness crab fishery continues as late as November. Hunting of migratory ducks and geese begins, with goose hunting in the flats near Richardson's Ranch and mallard hunting at numerous locations, such as Copper Bay, Cumshewa, Lagoon Inlet, Dana Narrows and Louise Narrows.
- **Winter** (Dec-Feb): People living in Skidegate fish steelhead and trout on the nearby Tlell River. Sometimes there are geese that can be hunted around Tlell in winter. People fish halibut, cod and rockfish from Lawn Point to Tlell. There is also a lot of shellfish harvested in nearshore areas. In the past, there were coastal traplines located around the Cape Ball/Argonaut Hill area, and south of Sandspit. Lots of river otter and marten may be trapped around Louise Island, Cumshewa and Selwyn Inlets in particular. Some people also used to go seal hunting at this time of year, and there have been a winter herring fisheries in Sewell Inlet and Lagoon Inlet.

Figure 22 depicts some of the predominant travel routes and seasonal movement patterns that were documented for the Hecate North and South seascape units during the HMTK study.

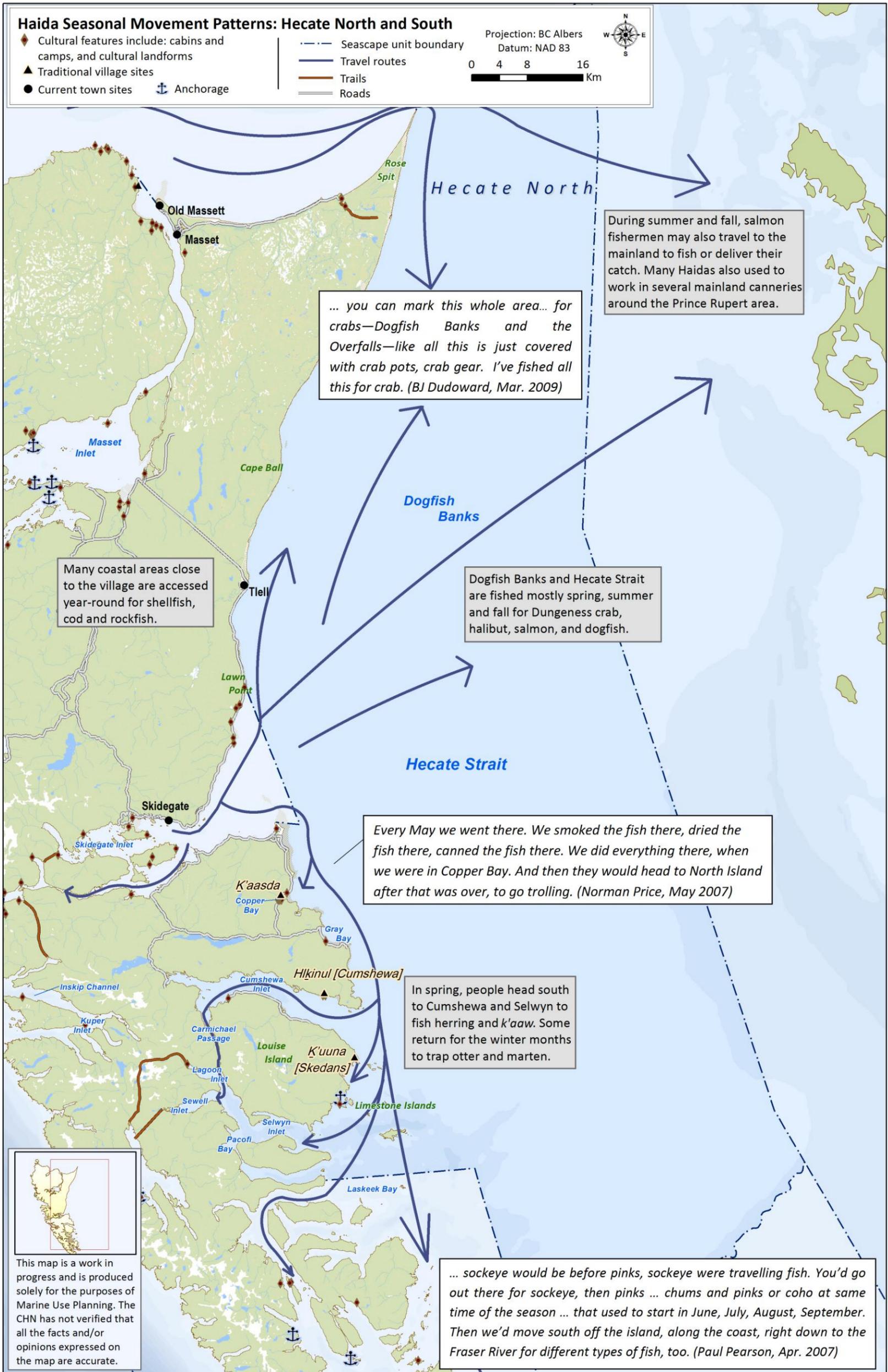


Figure 22: Map showing some key Haida seasonal movement patterns documented for Hecate North and South.

Introduction to Key Resource Uses

Approximately 60 different species are regularly harvested by Haidas in the Hecate North and South seascape units. In recent decades, resource use in the area has at times been dominated by one or more of the various commercial fisheries for herring, Dungeness crab, halibut and/or salmon. There was also a short period of time during which the commercial fishery for dogfish livers was very lucrative.

Yeah, we used to...fish dogfish on the whole east coast. ... When there was lots, you just went along and you could see oil slick ... they seem to secrete oil out of their gills or something. That's how you look for it – you catch sight of oil slick on the water, you set your nets. Gee, there used to be lots. ... Nobody goes after it now. During the war, during the forties, they were paying forty cents a pound for the liver ... that's all we used to take out of it. Forty cents a pound for dogfish liver was lots of money. And they had soupfin sharks, too; they paid five dollars a pound for the liver ... it's a little shark, about five or six feet long. ... They mix the oil with paint I guess for high-flying bombers. It don't ice up or something. (Claude Jones, May 2007)

There is still a commercial dogfish fishery in this area. Dogfish Banks is also heavily used for crab and halibut fishing, especially by Massett fishermen.

We fished all over in here ... almost right to Cape Ball. Well, this is all our crab fishing area right here anyway ... so all the crab fishing was done in here. ... I've been probably down this far, just outside of Sandspit... nobody just never went down that far, because we got all the crab we needed up here, when we were fishing. (Francis Ingram, Mar. 2007)

Hecate Strait is an important fishing ground for salmon, halibut and flounders. Haidas are mostly involved in the commercial salmon and halibut industries, with few people working in the drag fisheries. Many Haidas are active in the herring fisheries as well. Cumshewa and Selwyn Inlet are both known for their high abundances of herring – they are traditional *k'aaw* and bait fishery locations, as well as featuring importantly in the more industrial roe herring and reduction fisheries. In the past, there was a herring reduction plant located at Pacofi. Some elders remember seeing 40-50 ton catches of herring being delivered there. While herring and salmon fisheries have diminished in many areas of Haida Gwaii over the years, there are still important pink and chum fisheries in many east coast areas, but they are not as lucrative as in the past, nor are these species targeted as much for food as they used to be. Commercial spring fishing has been shut in Hecate Strait since the 1990s, and restrictions on coho also limit that fishery. However, many Haidas still target spring, sockeye and coho for food fishing. Finfish and shellfish populations continue to support significant food fisheries in many areas, such as Lawn Point to Tlell, Copper Bay, Cumshewa, Skedans, Selwyn Inlet and Laskeek Bay.

An introduction to Haida resource use in this part of Hecate Strait would be incomplete without a discussion of the Copper Bay sockeye fishery. The Copper River has a unique run of sockeye called *taaxid*. Skidegate Haidas have a long history of travelling to Copper Bay each spring to fish the sockeye.

Everything is done there—the canning, the smoking, and mum and dad used to believe in smoking...taking a lot of *ts'iljii* off the fish, and then they called it *k'aat'uu* fish. They'd smoke it for four or five solid days until it was right dry. And then just have it in the big layers and put it away. And then when we ate it, dad would take out a torch of some kind and just, you know, like burn the skin and we'd eat that. (Roberta Olson, Apr. 2007)

...we used to go to Copper Bay at low tide, going out, and we'd make sure we eat along the way and have the net all ready. From the low water mark, we used to start—as the tide comes up, move on, move on. Before high water, we'd have over five hundred. Used to be lots. That's... sockeye, yeah... when we come home, we'd leave a... skiff-load on the beach so people can go down and help themselves. (Ernie Wilson, Mar. 2007)

“Our main objective in going to Copper Bay was harvesting blueback.” (Gary Russ. Mar. 2007)

In addition to these unique sockeye or “blueback” as they are locally known, people harvest cockles, clams, mussels, and wild sea asparagus for food at Copper Bay. There are also good places to fish trout and hunt waterfowl. Copper Bay supports a big run of pink salmon, and had large coho in the past as well. Nearby Sheldens Bay and Gray Bay are also important for food harvesting; people get clams, urchins, chitons, shrimp, mussels, sea cucumber, crab, scallops, octopus, geese and ducks in these areas.

“Cumshewa’s got everything.” (Ernie Wilson, Aug. 2008)

South of Copper Bay, there are ancient Haida village sites at Cumshewa and Skedans. While no one lives year-round at these sites today, most Skidegate Haidas have been raised spending at least part of each year around here. Both are rich fishing and gathering areas, full of herring, salmon, halibut, rockfish and abundant shellfish.

Some winters we went to Cumshewa. ... We built a long house in Cumshewa. ... And there was a lot of seafood all the way along here. You didn't have to go very far for seafood, just walk from the cabin and you got seafood ... abalone, sea urchins, chitons, too. And the big ones ... *sciiida*. ... Oh, yeah, there was a lot of food there. Yeah. And you did a lot of fishing there too, all along there... [for] halibut. (Norman Price, May 2007)

... [of] course right in here is where the people used to troll for fish, food fish, all the time—just for salmon—all through [Cumshewa] Inlet. ... People used to pick up loads of fish from there when they were running back home. Put them on ice and then they can them up when they get home. (Captain Gold, Mar. 2009)

... herrings go back and forth through here [Carmichael Passage]...Yeah, anything and everything used to travel 'round and ... every little point had land otter slides all along—real wonderful trapline. ... All this, just the whole place was... where the lots otter ran. Holy! You should see it; it's like a big playground or something. (Ernie Wilson, Mar. 2007)

... all through this whole location here, from Limestone to Skedans, you can pick up all these rock cods and halibut and salmon, when they're running. And coming through here all the time are humpback whales and killer whales ... because this is a place for seals—the killer whales hunt and hunt and hunt. ... Limestone, of course, is the Ancient murrelet ... nightbirds ... there's a few places around here where the food likes to congregate around a reef, and the salmon are there too. And that's why the killer whales come through here; they look for salmon or they look for the seals. Humpback whales and whatnot just cruise through ... Yeah. That's a busy spot. (Captain Gold, Mar. 2009)

Halibut can be fished throughout the area, and salmon migrate through both these seascape units and into neighbouring Gwaii Haanas, making the whole area also very good for salmon fishing. Many study participants noted that parts of Hecate South, such as areas south of Cape St. James and out from Woodruff Bay, are very rich and have abundant marine life, including important forage fish like needlefish and herring. Halibut fished here often have bellies full of the small fish and many marine mammals are known to feed in this area.

Current Issues and Concerns

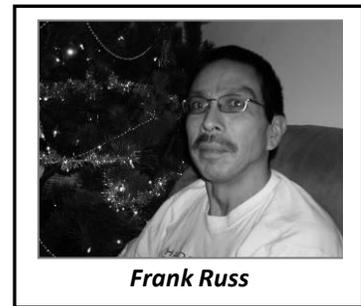
Some areas in the Hecate North and South seascape units are known for being particularly rich with intertidal life. Strong currents and high tidal activity mean that coastlines in places like Louise Narrows, Cumshewa Inlet and the islands off Skedans have very abundant shellfish populations. In the past, these included healthy populations of abalone. People now report that abalone have disappeared from most of their former areas.

“This part was real busy with abalone, all through this place right here [locations removed] ... Real rich with abalone one time. Wiped out in the seventies. Still never recovered. *Tah!* That place used to be so rich, you stop on one little rock and if you wanted to you could pick up 80 in one time – just for the heck of it – and still leave lots.” (Captain Gold, Mar. 2009)

... I went for abalone in here—this was probably twenty years ago now ... And this was in the fall because I was out there hunting actually. But I went and got a bunch of abalone ... then I went back there again the following spring and there was none. So I was thinking ... either they migrate ... or they're being poached; I don't know. ... Like it was different seasons when I was there, so maybe they move away from there during a certain part of the season. (Ernie Gladstone, Nov. 2008)

This is a widespread trend not unique to this area, but seen throughout Haida Gwaii. Aside from abalone, there were few other conservation concerns, species declines, or management issues raised for this area. It is possible that careful harvesting practices intended to distribute and mitigate impacts throughout the seascape unit are helping to sustain populations.

[Populations are] about the same every time we go there. We try stagger things – make sure we don't go back to the same spot every time. Try move it around, make sure things can replenish over the years and stuff, so... a lot of these things are sometimes maybe two, three years in-between, to five years sometimes... (Frank Russ, Dec. 2008)



Frank Russ

It is also possible that there is less fishing pressure in Hecate North and South than some of the other seascape units, as recreational fishers tend to have less of a presence in this part of Haida Gwaii. Nonetheless, participants did report some concerns around declines in numbers of forage fish (especially herring), changes in salmon fisheries, and potential conflicts between the proposed NaiKun windfarm and traditional resource activities in that area. There was mention of the bottom-trawl fisheries taking place in Hecate Strait, and concerns around the damage that draggers could be doing to the sponges and corals in the area (Old Massett verification sessions, Jun. 2010). In addition, it is likely that Hecate Strait and its resources will be affected by increased shipping activity and tanker traffic associated with proposed mainland developments. Some of these topics are explored in greater detail in the following section.

Declines in Forage Fish/Herring Populations

Just a few decades ago, areas like Cumshewa Inlet and Selwyn Inlet were renowned for their herring, earning nicknames such as “Million Dollar Bay” (Selwyn Inlet, mouth of Traynor Creek) for the lucrative roe on kelp and herring fisheries that took place there. High commercial catches and habitat destruction – specifically logging and log booming – are thought to have had the biggest impacts on herring abundance, with drastic declines following the short-lived reduction fisheries of the 1950s and 1960s. Many elders maintain that herring abundances have still not recovered to their former levels. Today, there is said to be even less feed available in areas like Hecate Strait, with significantly lower numbers of herring than in the past, and as a result, lower numbers of species that prey on herring, such as salmon, sea lions and killer whales.

In addition to declines in abundance, there is a possibility that some distinct stocks of herring may have also diminished or disappeared. Several places in Hecate North were identified by elders as having what may have been unique populations of herring in the past. Selwyn Inlet herring were reported to be some of the biggest herring on the islands. Cumshewa Inlet also had really big herring, and spawning occurred throughout the entire inlet. The spawn recorded for Cumshewa in Figure 23 is likely drastically reduced from past levels. In addition to those areas shown on the map, participants in the Skidegate verification sessions said that there are also high densities of needlefish (sand lance) found in two locations, 8 and 12 miles outside of Sandspit, and that coho and needlefish are also found at a shallow spot a few miles off Reef Island (Jun. 2010). These areas did not get mapped. Additional areas noted for presence of small squid, also important prey species, were also identified but not mapped during the Skidegate sessions.

Figure 23 on the following page shows the spatial information that was recorded for herring and other forage fish species in Hecate North during the HMTK Study. Because of the importance of herring both in the food chain and to commercial fisheries, Haida traditional knowledge for this topic has been summarized in a separate chapter of the Focal Species Summary. Readers are referred to the herring chapter in ***HMTK Volume 3*** for a more detailed discussion of herring topics for Hecate North and the rest of Haida Gwaii.

Salmon Fisheries

There are dozens of salmon fisheries that take place throughout this seascape unit, due to the wide diversity of species, stocks, timings and runs that characterize the area. There have historically been good coho and spring troll fisheries in Hecate Strait and along much of the east coast of both Graham and Moresby Islands. In-river food fisheries for sockeye take place in several locations, and commercial chum and pink fisheries are conducted at numerous places including Skedans Bay, Cumshewa, Selwyn, Sewell and Lagoon Inlets. Haidas have a long history of fishing salmon in these places.

“McLellan Island—it used to be really good for springs along here. Food fish, trolling. I fished there for probably... about 25 years ago I started. ... Yeah, in the eighties... great fishing there and also off Cumshewa Head ... for salmon.” (David Martynuik, Nov. 2008)

Almost wherever there was [a] fish creek... there was camps there. ... They had places all along, like I said, two or three houses. They looked like either just the frame might be there; they'd be out where there's a salmon creek. You take the planks load it on the boat. ... Good way to travel ... they all had different rivers to fish ... (Ernie Wilson, Aug. 2008)

During the HMTK interviews, people said that salmon numbers have declined over the last 20-30 years.

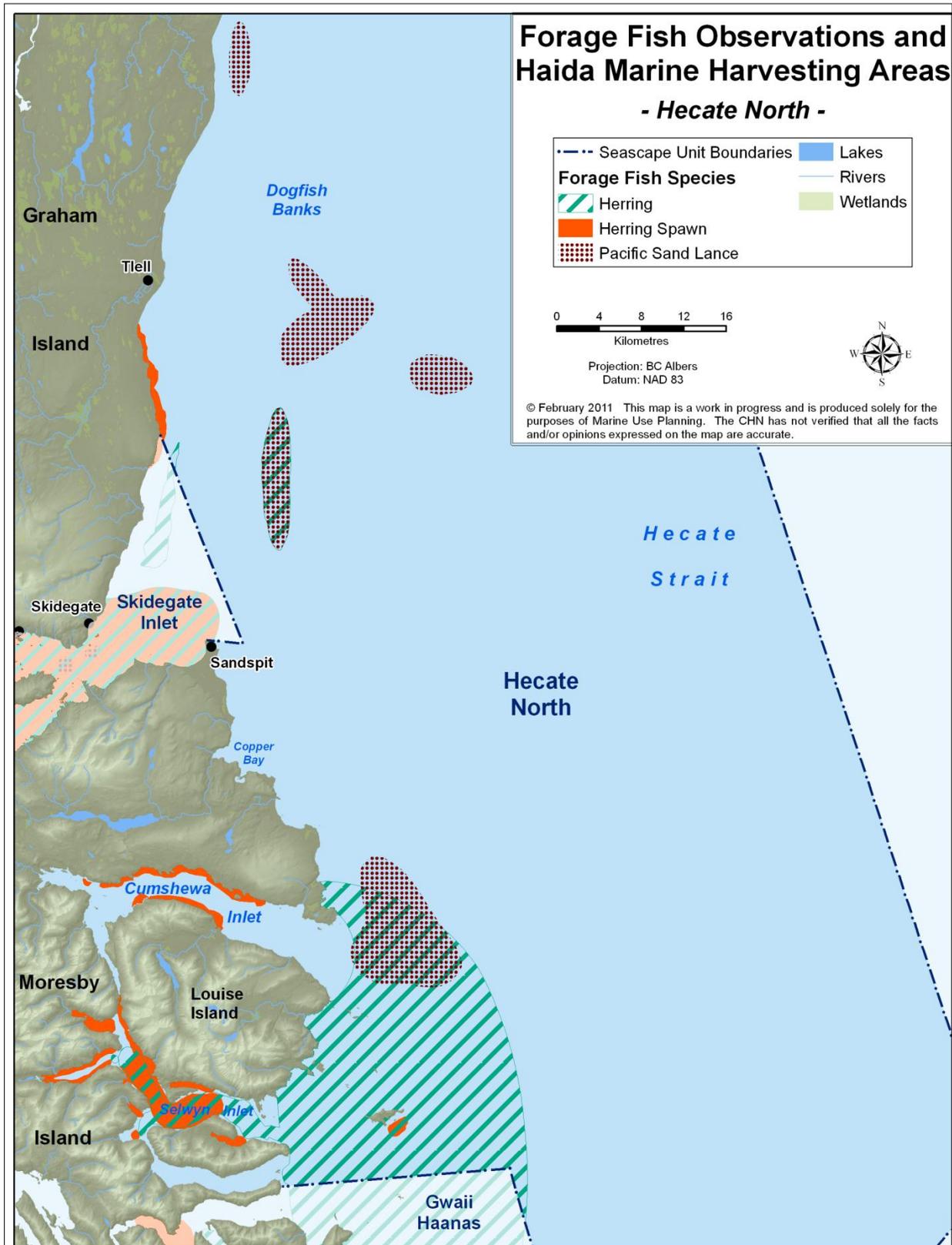


Figure 23: Map showing forage fish observations and harvesting areas documented for Hecate North.

[Salmon have] been just sporadic the last few years. You get [a] good year—like three or four years ago there was lots out here like there is now—there’s a lot of fish out there now [in Skidegate Inlet]. In Cumshewa it’s been dormant for a couple of years and there’s a lot of fish down there right now, and they’re probably two weeks late ... maybe even a month late—they usually come in the first part of September—and they’re just starting to come not too long ago, a few days ago. And it’s October 20th. We fished that late only once that I can remember ... over-fishing’s got lots to do with it. Interception on the high seas by foreign vessels too, got lots to do with it. Selling juvenile fish in supermarkets, and immature salmon caught on the high seas, product of China. The Chinese are catching, intercepting a lot of our fish—juvenile salmon. But this year’s unusual; there’s a lot of fish out there. There wasn’t much for the commercial fishermen though; they shut down the sockeye fishing in the Skeena and the Fraser River. ... Yeah, we didn’t get any sockeye this year. We got five from the band council and that was all. (Percy Williams, Oct. 2008)

Some of the concerns, ecological observations and population trends noted for this seascape unit are:

- Coho have gotten smaller in size and fewer in number
- Used to be a lot of coho all the way from north of Sandspit to Gray Point; there are much fewer now
- Coho and springs were more abundant in 1980s and 1990s
- Used to be fisheries for small sockeye in Cumshewa, like Copper Bay *taaxid*
- Lagoon Inlet was best for seining dog salmon and coho
- Lots of coho and chum used to go up Skedans Creek
- Copper Bay cohos have been “wiped out”
- Commercial spring fishing shut in Hecate Straits in the 1990s
- Commercial coho and pink fisheries outside Copper Bay have diminished

“...Cumshewa... yeah, right up the head used to be a lot of fish—humps, mostly. Yeah, Copper Bay was the most I’ve ever seen. [Now there’s] not as much as it used to be.” (Norman Price, May 2007)

On the following page, Figure 24 shows the salmon areas documented during the study.

The changes to the salmon runs have occurred within the lifetimes of the fishermen that were interviewed, and have affected peoples’ livelihoods through impacts to both commercial and traditional fisheries. Copper Bay was a productive area for commercial fisheries in the recent past.

Well, even Copper Bay for instance ... I remember fishing there with Roy Jones. Actually ...we were there kind of late, so all the pinks were pretty well gone. So we went into Gray Bay—that was 1956—and Gray Bay from one end to the other was alive with coho. And it closed at six Thursday evening and we had less than half an hour because from toward Cumshewa we could see the Fishery boat coming. So we smoked out a small set (chuckling) ...for that tiny little set we had 2200 coho out of it, and never put a dent in what was there. I never seen it like that again. (Wally Pollard, Jul. 2008)

Copper Bay has also sustained traditional fisheries over many generations and is especially important to people in Skidegate – many of whom go there each year to harvest the unique sockeye called *taaxid*.

Salmon Observations and Haida Marine Harvesting Areas

- Hecate North -

-  Fishing Lodges
-  Seascape Unit Boundaries
-  13 - More frequently identified
-  1 - Less frequently identified



0 10 20 30 40 50
Kilometres

Projection: BC Albers
Datum: NAD 83

© February 2011 This map is a work in progress and is produced solely for the purposes of Marine Use Planning. The CHN has not verified that all the facts and/or opinions expressed on the map are accurate.

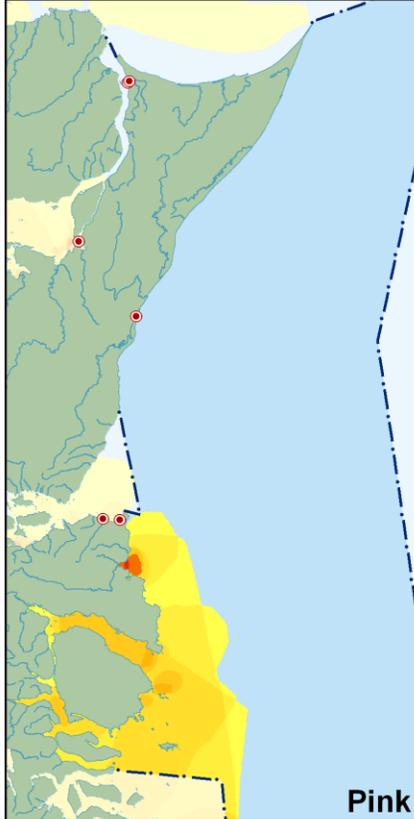
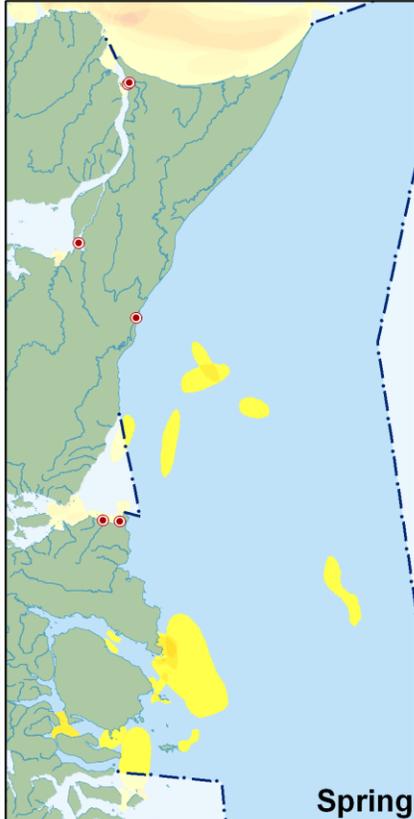
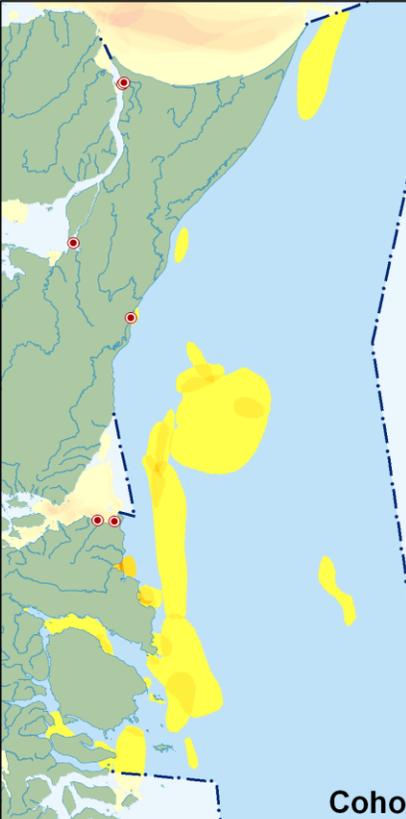


Figure 24: Maps showing salmon observations and harvesting areas by species, for Hecate North.

Copper Bay *Taaxid*

“... we used to get towed down [from Skidegate to Copper Bay]... my brother had a troller. Sometimes we’d go down with him and other times I remember going down with Fred Williams on the ‘Burnaby M’. [We’d] park right off Sand Point. Went at high water, unload all your gear and go ashore. We used to have our camp set up right on Sand Point ... We used to have a big canvas tent. [My parents would] usually go about the same time every year. Fish the tides ... probably first of April we’d head out there, because usually mid-April—when the big tide’s in the middle of the month—is when there’s good fishing. And then ... again it would be real good in mid-May... on the tides ... peak of the run’s the middle of the month on that tide. Some guys would get over two hundred [sockeye] a night.” (Lonnie Young, Apr. 2007)

Many Haidas still rely heavily on the traditional sockeye food fishery at Copper Bay. Elders report that they have seen declines in this population of unique sockeye in their lifetimes.

Well, I’d say sockeye for sure is right down. But it would be an absolute shame to decimate that type, because it’s the only type of sockeye in this whole world that comes into the Copper Bay. They call them *taaxid* in Haida. *Taaxid*. And the sockeye which come from the west side which are bigger and not as rich are called *s_gwaanang*. (Diane Brown, May 2007)

In the 1970s, slides caused by poor logging practices had a drastic impact on that population.

...for sure 1970 there were no sockeye...Well, they had logged over the Copper River, like drastically. Like pulled logs over the river and they just decimated it. It’s a miracle there’s any sockeye now. I remember because our first child was...four years old that spring when we went; we were there for just over a month, I think, trying to catch sockeye. All we caught were trout. So we canned and smoked trout and then we went hunting for deer. (Diane Brown, May 2007)

Today, the population has somewhat recovered from this event.

... it’s been a real uphill battle trying to get it re-stocked again. From all the years that we fished there for the sockeye... we’d see it go up and down and it seems to be levelling off pretty good now—seems to be a pretty good balance there, so. They seem to be coming along okay; they’re doing well in making sure that there’s enough up there... (Herb Jones, Mar. 2007)

However, the population may now be impacted by increased fishing pressure. Since ferry service to Moresby Island has improved access, more and more people have been going to Copper Bay to get their food fish, and fish numbers may be declining as a result.

... we used to go out into Copper Bay... that’s where we got most of our food fish, from Copper Bay—the abundance of it—because at that time there wasn’t that many Haidas in Skidegate ... but a lot of people came home and the population has grown and it’s hard for Copper Bay to support us now. That’s the reasons why the Band Council is sending people out to fish it out west coast or north end of the island or whatever. (Paul Pearson, Apr. 2007)

Now there's not too many [sockeye]. When I first got married I could go over there, to Copper Bay, while I was working on a boom in Alliford Bay area—the weekends I'd go to Copper Bay—fish one night, come home with three hundred and something fish. Just one night. Yeah, now you can do that and maybe get one or two. (Norman Price, May 2007)

Norman Price also mentioned a run of possibly unique coho at Copper River. He said that these fish are not seen anymore; “I remember Copper Bay had real big coho; they were about that thick but not too long—really heavy fish. But now they're just skinny ones. I don't know what happened. ... Yeah, real deep, wide fish, heavy ... only in Copper Bay, (Norman Price, May 2007).”

Marine Mammals

High numbers of seals and sea lions are also thought to be impacting salmon. Participants said that sea lion haul-outs are located close to some important sockeye rivers like the Copper, and that seals and sea lions are picking sockeye out of nets at Copper and Sandspit, as well as travelling far up-river to eat salmon. Several other participants felt that numbers of sea lions have decreased in the area, and yet others felt that the population is stable. Rookeries and/or haul-outs were identified for Rose Spit and Reef Island.

There are places within these seascape units where killer whales are sighted very frequently – outside Cumshewa Inlet and Skedans was one area that was consistently mentioned. Observations of several types of whales, as well as dolphins, can be quite common in Hecate North, especially during the *k'aw* and herring fisheries.

And sometimes when we're through and we're heading south with our product, out in Hecate Strait ...you could see whales as far as the eye could see. But not in the inlets; they were ...out in the Hecate Strait ... and that would be in the end of March, the early part of April. ... [They were sometimes] breaching, I would imagine feeding ... if the herring were in that volume in the inlets, they were probably out in the ocean also... (Gary Russ, Mar. 2007)

During the study, we heard that there may be fewer killer whales in these areas in recent years, but more humpback whales.

... this whole east coast from about Laskeek Bay south to even south of Rose Harbour, seems to be a lot more humpback whales than there used to be, in the last four or five years. You know, you always used to see them out there in the spring feeding on krill, but now you see them by the hundreds. Seems to be more and more out there. (Ernie Gladstone, Nov. 2008)

The marine mammal observations were not necessarily raised as management issues, but as trends and/or ecological observations.

Nesting Seabird Populations

Seabirds are another group of species likely suffering the impacts of reduced herring abundances in Haida Gwaii waters. The many islands and coastlines in some of the southern parts of Hecate North in particular have historically had dense populations of a variety of nesting seabirds; “All the islands—like in the mouth of Cumshewa there, that rock there, that had a lot of nesting birds. ... And any of the islands from there down... we'd go and pick up seagull eggs all the way,” (Herbie Jones, Mar. 2007). Skedans Islands, Limestone Island, Vertical Point and Reef Island were some of the places mentioned