



KITASOO XAI'XAIS STEWARDSHIP AUTHORITY



NEWSLETTER

FALL 2023

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Vern Brown
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Andrew McCurdy

Director's Letter

Yau Kitasoo Xai'xais Nation,

As the recently hired Acting Stewardship Director of the Kitasoo Xai'xais Stewardship Authority (KXSA), I want to take time in this letter to first acknowledge the many leaders for their guidance in stewarding the Kitasoo Xai'xais lands, forests, rivers, seas, and shores. I appreciate this opportunity to support the KXSA team in their roles as we continue to grow and learn from each other.

I have dedicated much of my time in recent years to language revitalization with the Kitasoo Xai'xais Languages Working Group. I want to gently reassure the Nation and our members that although I have taken on this new role, I intend to see those projects through to their greatest potential. Regarding the KXSA vision, we plan to expand our language revitalization efforts. However, it is crucial to consider the needs of the Nation and the current and future generations. We have recently gained the expertise of Jon Janzen, a linguist with a rich background in working with various Wakashan language families. He is enthusiastic about supporting our Sgüüxs language revival initiatives, including the transcription work that began in 2014.

I'd like to take a moment to encourage everyone who continues to fulfill stewardship responsibilities and work towards ensuring resources for future generations. Whether you're on the front lines leading research surveys, assessing population numbers by walking salmon streams, working in the office, or educating the next generation about their home, this is the true purpose behind our work. As natural-born stewards, it is our inherent duty to carry this work forward in a systematic and sustainable way.

Finally, to the entire KXSA team – past or present – on behalf of Kitasoo Xai'xais Nation, I'd like to thank you for your hard work and dedication to the work you do for Kitasoo Xai'xais and these places we call home.

Wai.

With respect,



Chantal Pronteau
Acting Director, Kitasoo Xai'xais Stewardship Authority

FEATURE

KX Guardian Watchmen Achieve BC Parks Ranger Authorities

Over the last three years, the KX Guardian Watchmen have undergone all necessary education, training, and security screening processes to achieve BC Park Ranger authorities. This achievement involved completing the sixteen-week Parks Law and Administration course at BCIT, participating in a two-week BC Park Ranger boot camp at Manning Park, undergoing comprehensive security screenings conducted by the RCMP and BC Parks, and dedicating numerous days to fieldwork, running scenarios, and honing the skills necessary to exercise their appointed authorities.

The entire Kitasoo Xai'xais Guardian Watchmen team expresses their gratitude to the people of Klemtu for witnessing their badge ceremony on July 18, 2023. Much hard work and determination led to this achievement, and they are grateful for the opportunity to represent and support the community and territory. They also thank their leadership and BC Parks staff for their dedication and passion in making this pilot project a reality.

During this field season, the Guardians worked from the station in Khutze Inlet to monitor and engage with tour operators and public members from the new 18' center console Guardian vessel "Xai Xais Scout." Since May 2023, the Guardians have regularly patrolled the territory, completing various surveys and engaging with vessels in the area. One notable highlight this season was when the Guardians encountered a commercial crab vessel within one of the six crab closures designated by the Nation. Utilizing their comprehensive compliance and enforcement training, the Guardians successfully compelled the vessel to release over five hundred Dungeness crabs. They also provided an escort to ensure the vessel left the closure area.

The KX Guardian team would like to thank all those who reported sightings and concerns throughout the territory this season and encourage community members to reach out anytime. The team looks forward to the coming year with planned training for search and rescue, further BC Park Ranger compliance and enforcement, and spill response.



PHOTO BY
Leanne Robinson

**"We are grateful
for the opportunity
to represent
and support our
community and
territory."**



FEATURE

Unlocking the History of Our Heritage: Cultural Feature Inventory Surveys

This year, our journey with the Cultural Feature Inventory (CFI) program has led us to uncover pieces of our heritage and connect us more deeply with our ancestors.

The Process of Discovery: CFI Surveys

Cultural Feature Inventory (CFI) Surveys play a critical role in our Nation's commitment to sustainable forestry and cultural preservation. These surveys aim to document traditional land uses, detect evidence of historic activities, and identify features and sites of cultural heritage significance. With this information, the CFI team collaborates with our Nation-owned forestry company, KXSA planners and the government, to protect these features from logging and other commercial activities.

There are five categories of cultural features: Indigenous Heritage Features (such as village or harvesting sites), Indigenous Forest Resources

(such as important medicinal plants and trees), Culturally Modified Trees, Cultural Cedar (i.e. Monumental Red Cedar), and Western Yew trees. The surveys begin with reconnaissance, utilizing maps, reports, traditional knowledge, and more to compile preliminary data about potential sites. Our local CFI crew then conducts transects and visual inspections of sites to verify and expand upon this data. Then, archaeologists and other specialists conduct further studies, unlocking the stories held by these sites. Our findings are recorded and shared with Kitsoo Forest Company (KFC) and its associates, Western Forest Products (WFP) and Capacity Forest Management. Together, we mitigate risks to cultural features by establishing appropriate buffer zones or remapping potential logging sites. For example, when the CFI crew identifies a Type 1 Indigenous Heritage Feature anywhere in the territory, our report alerts forestry crews of their legal responsibility to strictly avoid logging anything within a 200-meter area surrounding the site. If the potential logging site needs to be remapped, they do so to protect the cultural feature. The buffer zones vary depending on the feature, but each one has a legal requirement for forestry to avoid logging within a specific distance to preserve the feature.

The Findings: Habitation Sites and More

This year, the CFI crew surveyed Surf Inlet and South Pooley Island to inform forestry management decisions. In total, the CFI crew covered almost 30 hectares, surveying five proposed logging sites. A total of 64



PHOTO BY
Rebecca Benjamin-Carey



Monumental cedars, 3 Yellow cedar Culturally Modified Trees (CMTs), and 3 Western Yew trees were found in Surf Inlet and 44 Monumental cedars on Pooley. Where CMTs and Yew trees of a certain size need to be fully protected, only a portion of Monumental cedars need to be protected. We aim to protect 35% of these Monumental trees that we find. In the last round of surveys at Pooley Island, 14 Monumental cedar trees were protected from logging, and earlier this year, we protected 22 at Surf. In addition to the Monumental cedars and cultural features, our crew identified possible habitation sites and burial sites.

The Power of Collaboration: KXSA & KFC

The collaboration between Kitasoo Xai'xais Stewardship Authority (KXSA) and Kitasoo Forest Company has played an instrumental role in "unlocking" more of our territory. Last year, the Kitasoo Forest Company and Western Forest Products Joint Venture committed \$300,000 over three years to expand on the Cultural Features Inventory Program. Their financial and logistical support enables us to take these surveys to the next level to identify and protect cultural features not directly associated with forestry development projects (e.g. in the broader territory) and accumulate knowledge about the history of Kitasoo Xai'xais heritage and past land uses. Habitation sites are typically discovered while searching for

cultural features in potential logging sites. As long as the necessary resources are available, these sites are relatively easy to find elsewhere in the territory, which is why this collaboration is crucial. Our Nation's forestry company recognizes the importance of this investment and wants to support the community in a way that enriches our culture and respects traditional knowledge.

Community Engagement: The Next Generation

A highlight of this year was witnessing our school children visit some of these cultural heritage sites as part of their math class. They learned about CFI surveys, logging in the territory, and saw the 16 data/temperature loggers we installed this year to monitor stream health downstream from forestry areas. It was valuable for the kids to see firsthand how they can apply math practically to doing work that benefits the community within their territory.

Preserving Our Past for the Future

The CFI program has become an invaluable tool for understanding our past. We can now date heritage sites through modern scientific testing methods, providing a tangible link to our ancestors. Through these surveys, we're not just protecting cultural features from logging. We're unfolding a story of our people, our heritage, and our connection to this land.

PHOTO BY
Laurel Sleight



Unveiling the Secrets of Salmon: The KXSA Catch Monitoring Program

One of the challenges faced in KX salmon stewardship is that young salmon leave the rivers of the territory and are subsequently fished in other regions of the Pacific, such as Alaska, without the Nation's knowledge or input. With immense gratitude for the community's support and commitment, KXSA has embarked on an exciting project to address this issue. We have started including the unique genetic identity of our salmon stocks in a coastwide 'genetic library.' This allows us to recognize when Kitasoo Xai'xais bound fish are caught elsewhere. Last year alone, we collected 198 coho and 303 sock-eye samples from eight different salmon rivers throughout KX territory to support this project. This task involved capturing salmon migrating upstream or lingering near the river mouth. Once we caught a fish, we took a small sample from its tail fin and gently released it back into

the river. We then processed these samples at our office and sent them to a lab to join others in the DNA baseline.

This work forms part of a greater initiative - a Central Coast-wide catch monitoring program. Our goals are to assess risks to salmon conservation and resilience, identify where and when salmon are captured within our territory, determine the fishing pressure we face, and ensure that we fulfill our community's needs regarding salmon. The KXSA catch monitoring program is built upon three essential pillars:

1. Dockside Surveys

We developed our catch interviews in collaboration with harvesters and stewardship staff. These interviews involve asking harvesters what



they caught, where they caught it, and how long they spent fishing. Our Kitasoo Xai'xais program is unique compared to other Central Coast Nations because we gather information about all types of marine species harvested, not just salmon. Our dockside monitoring program is adaptable and can also be applied to monitor our community-based fisheries once established.

2. Overflight Surveys

Overflight surveys estimate the total fishing effort in the territory by counting fishing boats.

3. DNA Sampling

By taking samples from the salmon during harvest and spawning seasons, we can trace their journey and identify which populations are being caught along the coast. This also helps us estimate how many Kitasoo Xai'xais salmon are returning home or being intercepted up north. From our 2022 DNA sampling, we learned that

many Chinook caught in Kitasoo Xai'xais territory last summer were on their way further south. However, most of the Coho caught last summer were heading to their home rivers either within the territory or within the Central Coast.

The data we gather through the catch monitoring program holds immense value for the community. It deepens our understanding of fishing pressure on salmon within the territory, provides insights into salmon population health, and informs us of their migration patterns. Armed with this knowledge, we can make well-informed pre-season and in-season management decisions, both at the Nation level and in collaboration with the Canadian government. Additionally, we can recommend catch limits to entities such as North King Lodge, ensuring a sustainable balance between conservation and utilization.

Continued Monitoring of Kitasu Bay: Kitasoo Xai'xais' Indigenous Protected Area

The Kitasoo Xai'xais Nation recently declared Kitasu Bay as an Indigenous Protected Area, which mandates closures of recreational and commercial fishing. As part of our stewardship responsibilities to manage this new protected area, KXSA has been working towards conducting baseline inventories of the bay.

Scoter Herring Spawn Interactions

Thousands of white-winged and surf scoters gather in Kitasu Bay every year to feed on herring eggs during the herring spawning season. The Department of Fisheries and Oceans (DFO) conducts herring dive spawn assessments

shortly after spawning, and scoters have been observed actively feeding on herring eggs long after these assessments have finished. Based on observations by the Co-management crew, who conduct extensive fieldwork and data collection in the territory, scoters consume a significant proportion of the spawn before the herring eggs have a chance to hatch. This may substantially alter estimates of viable herring stock. The study seeks to collect real-world data on how scoters might affect the herring spawn. This information will help improve the factors used to adjust for natural death rates in managing herring stocks. During the herring spawning period, KXSA partnered with Liam Ragan and

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Moonfish Media





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Andrew McCurdy

Kai Bosch to conduct bird inventories. The initial analysis of this work suggests that bird counts have increased almost threefold from 2016 to the present, with a maximum of 48,000 scoters observed in one day.

Multi-Species Surveys

Using DFO's multi-species survey dive-based protocol, we aim to collect data on the density and size of certain types of bottom-dwelling marine invertebrates. These include sea urchins, abalone, sea cucumber, geoduck, and sunflower stars. We also record information about habitat characteristics. This summer, Matt Hopkins and Jocelyn Schneider helped us with multi-species surveys in Kitasu Bay. We conducted 45 surveys and trained our new commercial divers, including Nick Duncan and Sylvain Dalanson, so that we can continue these surveys in the future.

Temperature Data Loggers

Changes in water temperature affect marine species. Therefore, KXSA deployed several temperature data loggers throughout Kitasu Bay and the KX Territory. This data will help explain any changes we may be seeing in other species we are assessing.

"The initial analysis of this work suggests that bird counts have increased almost threefold from 2016 to the present."

Climate Action: Embracing the Heat Pump Revolution

Klemtu has had a huge rise in heat pump installations, making it a leader in the BC heat pump revolution. These systems not only reduce carbon emissions but also provide efficient heating and cooling for homes. Currently, we have installed 50 heat pumps, and our aim is to have one in every home as part of our commitment to a greener future. Additionally, we plan to install heat pumps for hot water tanks, eliminating the need for heating oil entirely.

Empowering the Community Energy Plan

We are preparing to develop a new Community Energy Plan, a comprehensive strategy that integrates our community's efforts towards sustainable energy practices. This plan is not just a document; it represents our dedication to the environment. The heart of this plan is community engagement. Our town's energy future will be shaped by collective action, and we can't wait to involve each of you. We'll announce when community engagement starts.

Your Role in Climate Action

Are you passionate about climate change? Join us in our climate action quest! Your involvement is invaluable, whether you're an experienced environmentalist or just starting out. Reach out to Bryn Armstrong, our Climate Action Coordinator, and let her know what Klemtu needs in terms of climate action. We're working towards a greener community, but there's always more to do for a happier and healthier Earth.

DIY Maintenance Made Easy

Apex Heating and Plumbing is excited to release user-friendly tutorial videos for easy heat pump maintenance at home. If you are interested in becoming the go-to person for heat pump maintenance in our community or joining a climate action working group with per diems, please email Bryn at ClimateAction@kxsa.ca.



"We're taking steps to be a greener community but there's always more to do to make the earth happier and healthier for everyone."

Shipping & Marine Response: Improving the Nation's Preparedness for Marine Incidents

Kitasoo Xai'xais Stewardship Authority continues to work on a variety of projects aimed at improving the Nation's preparedness and response capacity in relation to marine shipping incidents.

Places of Refuge

The KXSA Marine Working Group has identified Baker Point as a potential Place of Refuge, where vessels in distress can seek safety while waiting for assistance. After negotiations, we have received funding to conduct environmental baseline surveys at Baker Point. This will allow us to assess any impacts to Baker Point or the surrounding area if a marine incident were to occur. The Kitasoo Xai'xais dive team conducted dive surveys in July. The results of this dive survey were shared with the Marine Working Group, and we are working on gathering input on the suitability of the site as a Place of Refuge.

Geographic Response Strategies

This summer the Guardian Watchmen continued to create Geographic Response Strategies for Areas of Concern throughout the territory. This process entails visiting sites and making a plan for how best to protect culturally and ecologically important areas in the event of an oil spill. In June this year we completed surveys for 15 locations and the Guardians continued to work on the remaining sites through the summer. Our goal is to complete the remaining sites in the summer of 2024.

Response Equipment and Training

KXSA is working with the Coast Guard to organize Marine Oil Spill Response and Recovery training, along with an exercise in Klemtu during the spring. This will enable community members to gain hands-on experience and be prepared to respond to incidents within the territory.



PHOTO BY
Andrew McCurdy

Language Revitalization

For decades, the Kitsoo Xai'xais Languages Working Group (KXLWG) has been leading the Kitsoo Xai'xais Language Revitalization project with guidance from the Kitsoo Xai'xais Nation Council's Resource Stewardship Department. Together, we document, preserve, teach, and revive the Kitsoo and Xai'xais languages, ensuring their preservation for future generations. We are honoured and humbled to share our language revitalization project's recent advancements and upcoming initiatives.

Current Projects

This year, we have applied to two grant programs offered by the First People's Culture Council: Pathways to Language Vitality and the Language Technology Program. The Pathways to Language Vitality Program provides funding and support for community-led projects revitalizing First Nations languages in British Columbia and helping create fluent speakers. The Language Technology Program provides funding, equipment, and training to support language revitalization using technology.

Our team has significantly progressed in transcribing and creating new language resources, incorporating our traditional stories and conversational speech. We have also documented more recent stories in Sgüüxs and Xai'xais languages.

Upcoming Initiatives

Looking ahead, we are excited about recruiting new team members to lead our language revival projects for the Xai'xais and Sgüüxs languages. We are planning on collaborating with the First Nations Education Foundation (FNEF) to develop a dictionary for our languages. We are eager to engage with the community through visits,

project-based learning, and language preservation.

We are excited to announce a collaborative effort to host a "Mini Klemtu music festival" tentatively set for late February 2024. This festival will allow community members to immerse themselves in music, language lessons, and cultural celebrations.

Our Team

Chantal Pronteau, the newly appointed Acting Director of KXSA, has played a vital role in aligning language revitalization initiatives with funding work plans. From October 2019 to September 2023, she served as the Languages Project Supervisor. She provided support to Desiree Brown, our dedicated Sgüüxs Data Management Lead, in her archiving pursuits along with leading the material development projects with our storybook projects.

Desiree Brown joined us in September 2022 and has since been on an inspiring journey of learning our language. Her contributions, like creating language translation colouring pages, have enriched our project, and we look forward to her future endeavours in teaching the language within our community.

Resources

Community members are always welcome to visit us at the Kitsoo Xai'xais Stewardship office building from 9 am-4 pm, Monday-Friday to learn more about the Language Revitalization Program.

Visit [klemtu.com/stewardship/language](https://www.klemtu.com/stewardship/language) for a list of language resources.

Supporting Emerging Aboriginal Stewards (SEAS)

The summer SEAS program concluded on Friday, August 18th, after a fulfilling season of engaging activities. The program started off with a fantastic four-day camping adventure at Canoono Lake, led by the amazing Rye Green. For the rest of the busy summer, we enjoyed various outdoor activities, including hiking, swimming, canoeing, and wilderness explora-

tion. Throughout the program, we had the pleasure of hosting special guests such as Emilee Gilpin, who spent time with the Moore Foundation team, Julia Conzon, and archaeologist Aaron Evans (also known as Blake). Despite the heat, it was a memorable and enjoyable summer with enthusiastic youth and our exceptional skipper, Tony Robinson.

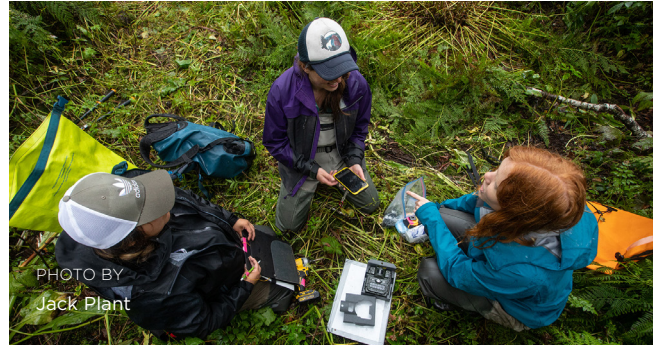


PHOTO BY
Vern Brown

Kitasoo Xai'xais Research Projects

BEAR ECOTOURISM

When ecotourism was canceled due to COVID-19 in 2020, this offered a unique opportunity to understand bear activity when people weren't around. KXSA deployed motion-sensing cameras in two main bear-viewing watersheds, Khutze and Steep, in 2020. In 2021 and 2022, KXSA continued collecting data in Khutze and Steep, in addition to Green River in 2021. Using the remote camera data, ecologists were able to run statistical models to test how human activity influenced bear activity. This summer, we continued collecting camera data in Steep and ran a similar analysis during the fall and winter. Using results from Khutze and Green, KXSA also plans to implement evidence-based management measures on bear-viewing in collaboration with BC Parks where appropriate. In order to assess the effectiveness of these measures, we are implementing a monitoring program using cameras and data collected by ecotourism operators in Khutze and other key bear-viewing



watersheds, such as Mussel and Canoona. Remote cameras were set up in Khutze, Mussel, and Canoona to monitor bear activity from the beginning of August until October 15th. The data are currently being analyzed to help inform the management of ecotourism activity.

SALMON EGG BOXES

Restoring wild salmon is a top community priority, and as part of our efforts, the KXSA research team will collaborate with Hatchery staff to trial egg boxes to increase wild salmon egg survival in-river. These boxes protect fertilized salmon eggs from predators, water level fluctuations, and other risks. If successful, we plan to use this technology to rebuild salmon stocks in wild rivers from 2024 onwards.

PRAWN SURVEYS

Prawns are an important food species and an important component of the new community-based fisheries. Stewardship has conducted prawn surveys across KX territory for the past two years to gather information for informed management. These surveys involve four long-lines with ten traps, set daily for a week. The dataset will help us understand prawn trends and compare recent surveys to those in the 1990s for temporal changes.





TEMPERATURE LOGGERS

Suitable river temperature is critical for the success of salmon stocks in the territory. To help understand the changing local river conditions, we have installed temperature loggers in 15 different rivers throughout KX territory. Our goal is to assess the vulnerability of salmon populations to climate change and to target fishing and restoration efforts accordingly. We have also placed data loggers in creeks and rivers that feed into James Bay. These devices will monitor potential impacts on salmon populations resulting from upcoming logging activities in these crucial salmon-bearing watersheds. Our focus is on examining any alterations in river temperature and levels of dissolved oxygen.

CRAB SURVEYS

Dungeness Crabs play a vital role in ensuring food security, but they are also highly sought after by recreational and commercial fishers. For several years, Ernie, Sandie, and Co-management collaborated to conduct crab surveys, gathering valuable information on abundance. This data helps implement fishing closures within the territory. KXSA monitors closure effectiveness in meeting the community's crab needs through quarterly surveys. Six sets of Traps are placed at ten locations across the territory, including closure and control sites.



KWAKWA WEIR

Accurately documenting salmon returns to food fish rivers is crucial for effective salmon fishery management and negotiating with the Department of Fisheries and Oceans (DFO). However, one of the main KX food fish rivers, Kwakwa, is very challenging to count salmon due to its massive scale. To tackle this challenge, our team installed a metal weir below Kwakwa Lake in May 2023. This weir will be used to count salmon as they pass through a camera box and give us a more accurate understanding of the amount of salmon returning to Kwakwa each year. Our team will share the data collected with the Food Fish Committee regularly during the fishing season.



Our Team

KITASOO XAI'XAIS STEWARDSHIP AUTHORITY STAFF



Chantal Pronteau
Acting Director



Vernon Brown
SEAS & Outdoor
Coordinator



Elmer Starr
Community-Based
Fisheries Coordinator



Desiree Brown
Sgüüxs Data
Management Lead



Krista Duncan
Skipper



Rolene Robinson
Administrative
Assistant



Sierra Hall
Lead Research Field
Technician



Nick Duncan
Commercial Diver &
Field Technician



Cameron Robinson
Research Field
Technician



Jason Neasloss
Guardian Watchman



Medrick Robinson
Guardian Watchman



Spencer Mason
Guardian Watchman



Tim Robinson
Guardian Watchman



Matthew Danes
Guardian Watchman



Ivan Robinson
Guardian Watchman



Roberta Duncan
Youth Coordinator



Julianne Humchitt-Mason
Youth Coordinator



Benita Duncan
Community Marine Planning Coordinator



Santana Edgar
Community Marine Use Coordinator



Rob Duncan
SEAS Skipper & Assistant Coordinator



Ben Edgar
Research Field Technician



Evan Loveless
Stewardship Advisor



Ken Cripps
Marine Planning & Fisheries Advisor



Christina Service
Wildlife Biologist & Science Coordinator



Rosie Child
Lands & Resources Advisor



Brady Stjerneberg
Operations Manager



Laurel Sleight
Marine Planner



Marlie van Roy
Data & Engagement Coordinator



Monica Short
Stewardship Planner



Sylvain Dalanson
Dive Coordinator



Bryn Armstrong
Climate Action Coordinator



Julian Heavyside
Fisheries Technician



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**PO Box 119, Klemtu, BC, V0T 1L0
(250) - 839 -1096
admin@kxsa.ca**

klemtu.com/stewardship