Brief Update on Some Activities at Ocean Networks Canada

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A UNIVERSITY OF VICTORIA INITIATIVE

First, A Disclaimer

As of July 1, 2023 I no longer work at ONC, and am transitioning into retirement. However, I remain well connected and consult with ONC staff regularly and they have provided me with some highlights to mention.

In addition to more golf and tennis,
I may soon be spending time
cruising the Salish Sea on
my boat Tsona
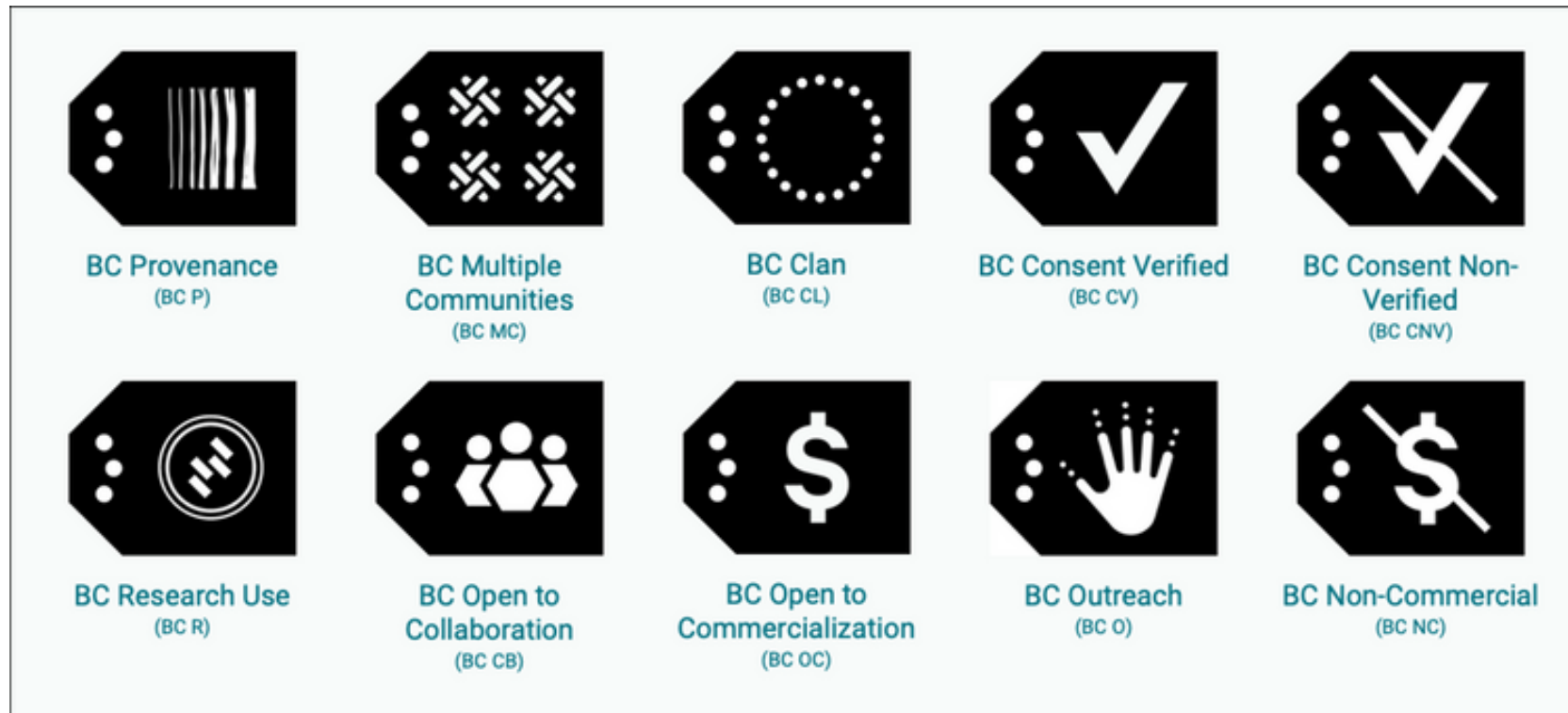(final purchase pending)
I do plan to attend OSM …

A Summary of 2023 ONC Highlights - 1

- Three successful expeditions, 1 in-shore and 2 off-shore on the CCGS John P. Tully and the E/V Nautilus

- New 2030 Strategic Plan with three main areas of focus:
  - Advance Ocean Observing: technically, geographically, diversely
  - Develop and Deliver ocean intelligence products and services
  - Enable ocean-based solutions for CC mitigation and resilience

- Renewed CFI operating funding for next 6 years (2023 – 2028)

- In addition to Solid Carbon, successfully partnered and deployed an [experiment](#) at Clayoquot Slope in collaboration with Running Tide to quantify the feasibility of deep sea carbon sinking.

- Unsupervised Machine Learning being used to monitor for Hydrophone anomalies, such as decreases in sensitivity/drop-outs, etc.

- Incorporating "Local Context" in customized data labels for indigenous community observatory data following the CARE principals (Collective benefit, Authority to control, Responsibility, Ethics).

Adoption of Traditional Knowledge (TK) and BioCultural (BC) Labels and Notices (Decolonizing Data)

BC Provenance
(BC P)

BC Multiple Communities
(BC MC)

BC Clan
(BC CL)

BC Consent Verified
(BC CV)

BC Consent Non-Verified
(BC CNV)

BC Research Use
(BC R)

BC Open to Collaboration
(BC CB)

BC Open to Commercialization
(BC OC)

BC Outreach
(BC O)

BC Non-Commercial
(BC NC)

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A Summary of 2023 ONC Highlights - 3

- Implementation of an OpenAPI interface, a suit of specifications and tools for machine-2-machine web services (Application Programming Interface).
- This provides for faster and more accurate creation and sharing of data extraction code which will enable more ML and AI access to ONC data.
- Following early adaptation of FAIR data principals (Findable, Accessible, Interoperable, and Reusable), ONC is preparing systems for FAIR^2, to make Oceans 3.0 a Facility that is AI Ready (ocean intelligence).

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