Lake Winnipeg Nearshore Monitoring

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Water Quality Monitoring & Surveillance – Hudson Bay

Environment & Climate Change Canada

Lake Winnipeg Research Consortium Science Workshop

Feb 4 – 5, 2020

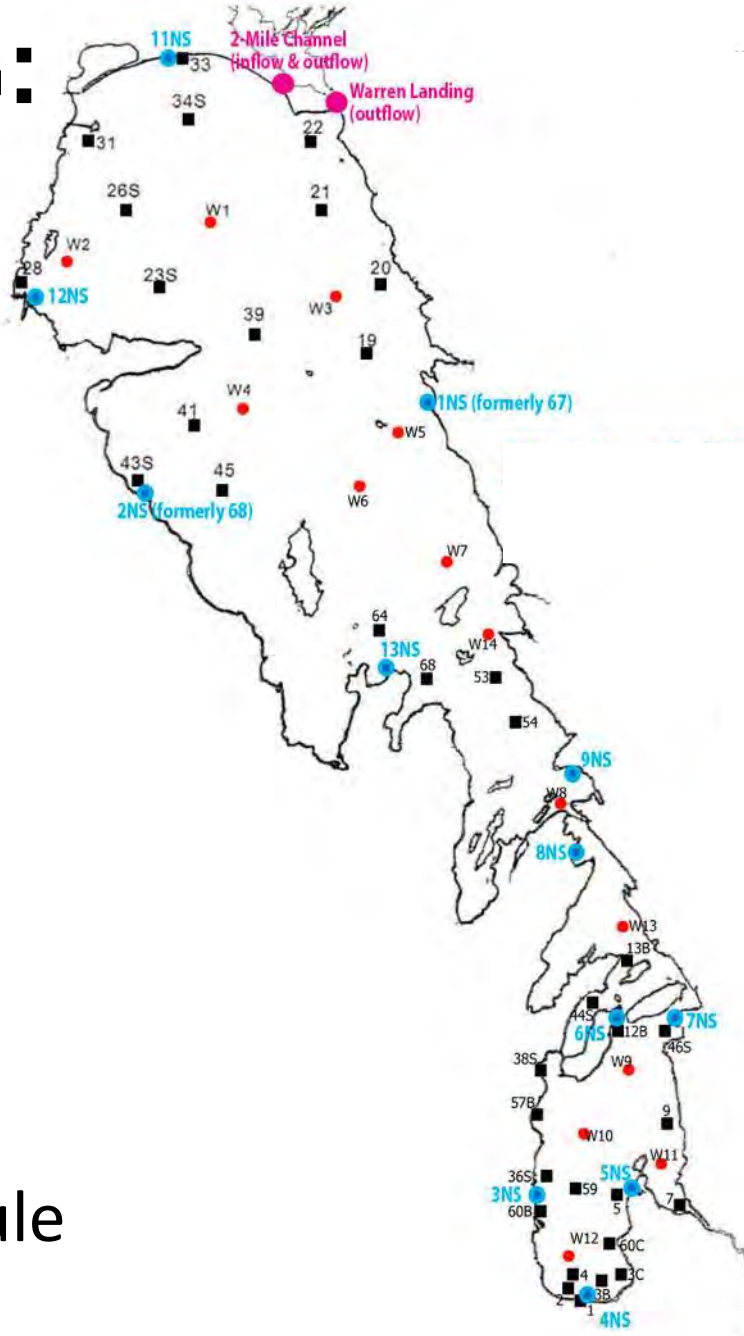
Environment and
Climate Change Canada

NEARSHORE MONITORING:
FILLING THE KNOWLEDGE GAP

EC PILOT PROGRAM
2009 – 2010

- 5 South Basin stations
  - 2 sites per station:
    1m depth; 3m depth
- Netley-Libau Marsh stations
- Water quality and biota
- 1 visit per year

NEARSHORE MONITORING:
FILLING THE KNOWLEDGE GAP



PROVINCIAL MONITORING
2014 ONWARDS

- 12 stations around both basins
  - 3 sites per station: transect at 1m; 2m; 3m depths
- Water quality only
- Sampled on the Namao's schedule

NEARSHORE MONITORING:
FILLING THE KNOWLEDGE GAP

ECCC UNDER LWBP:
2017 ONWARDS

- 8 – 9 road accessible stations
  - 2 sites per station:
    1m depth; 3m depth
- Netley-Libau Marsh stations
- Water quality and biota
- 3 visits per year (spring, summer, fall)

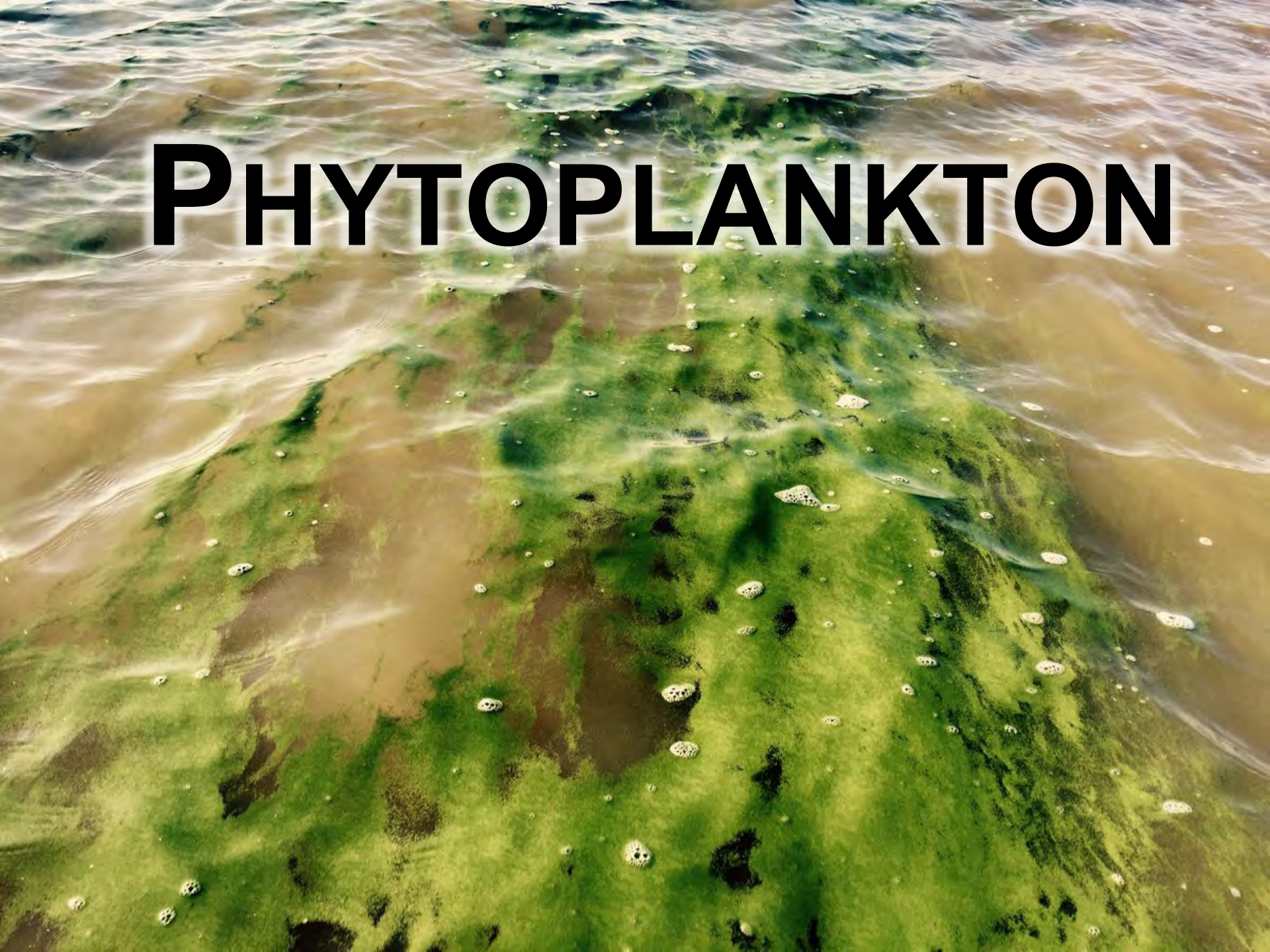
3m Sites

1m Sites

Wetland Sites

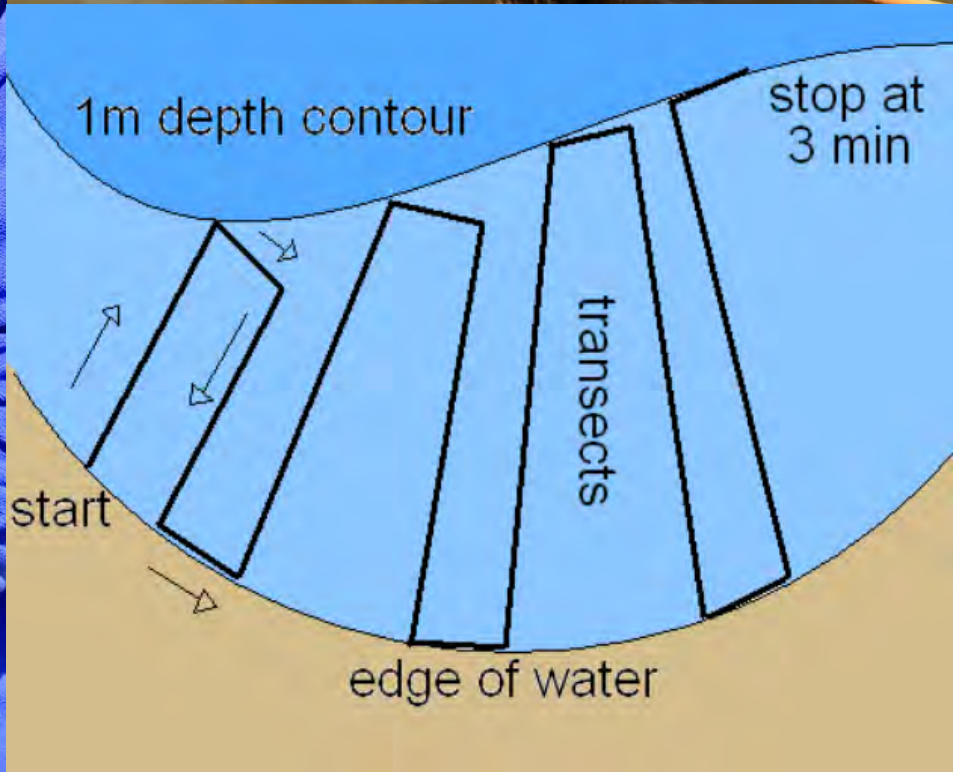
Wetland Sites

WATER QUALITY
MONITORING

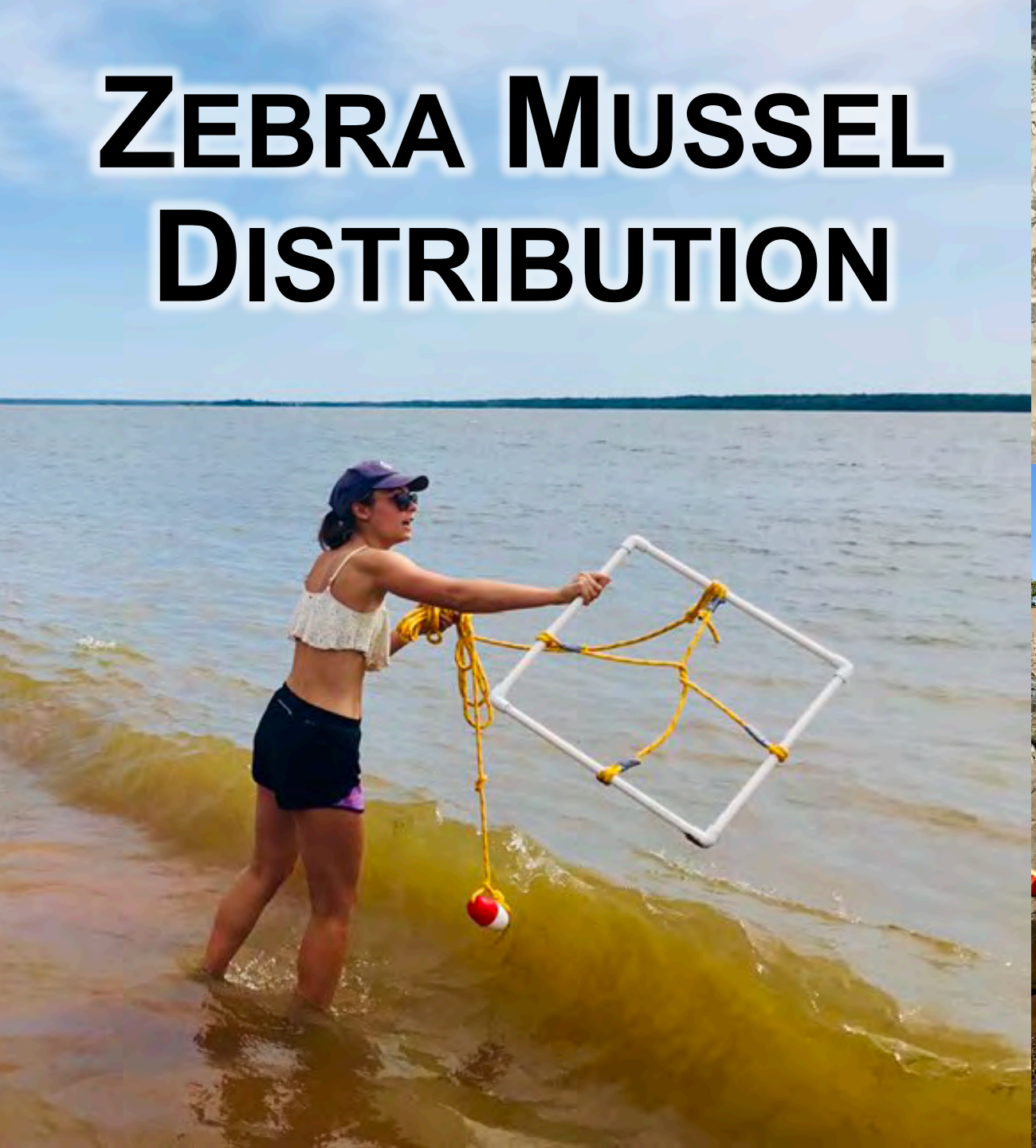

PHYTOPLANKTON

Zooplankton

Benthic Invertebrates



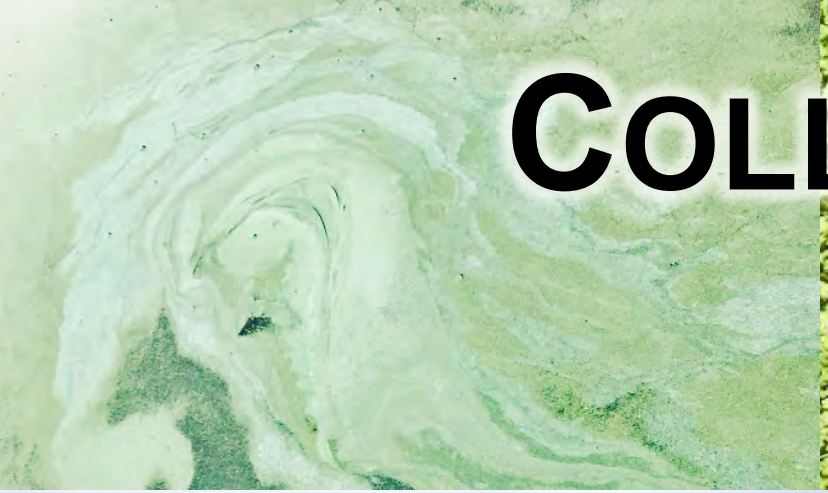
Zebra Mussel Distribution

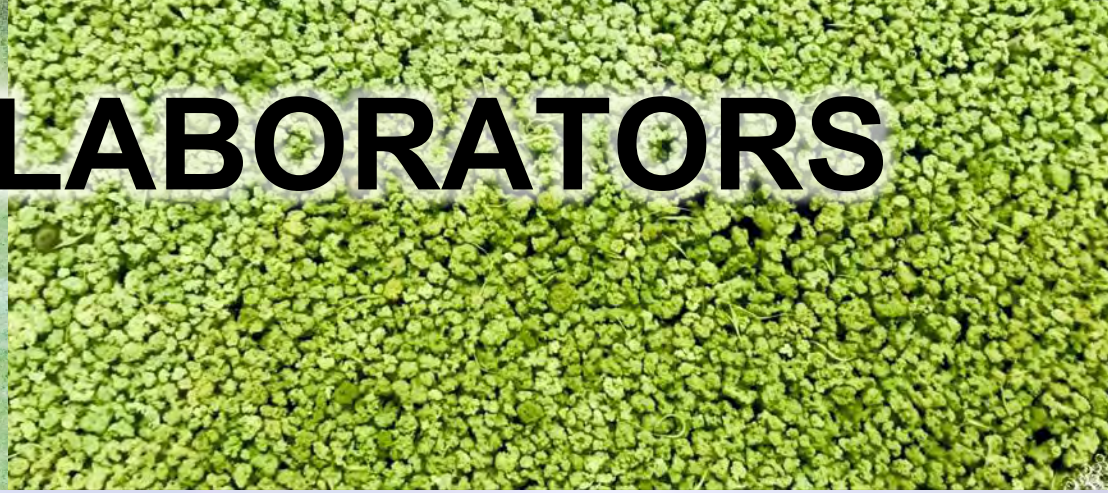


COLLABORATORS

Matson; Davis; Zastepa (BGSU & ECCC)

COLLABORATORS

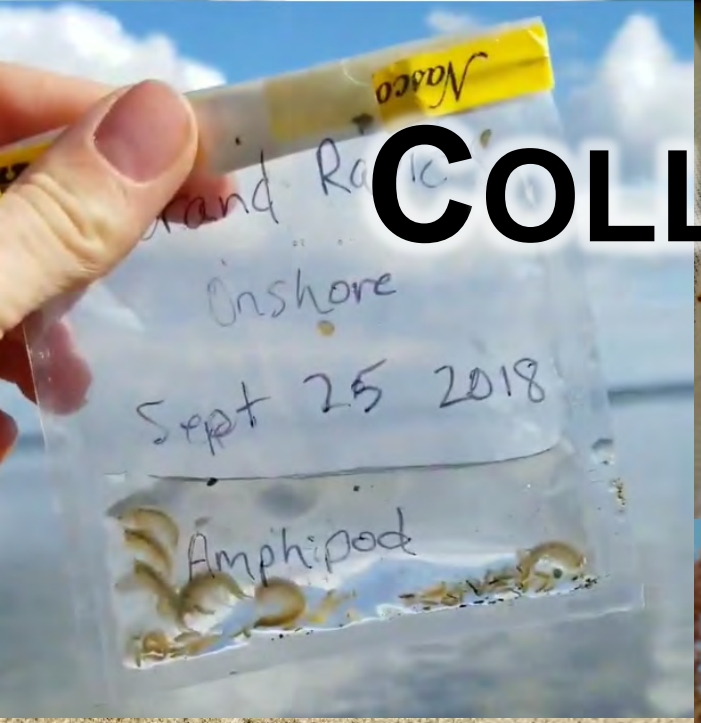




Algal toxins – Stratton; Burton (MB)

Bloom truthing and composition – Binding; Zastepa (ECCC)

COLLABORATORS



Stable isotopes and food web dynamics – Ramlal (DFO)

COLLABORATORS

Photo credit: Amanda

Littoral zone fish community surveys – Caskenette; Enders; Watkinson (DFO)

Photo credit: Amanda Caskenette

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