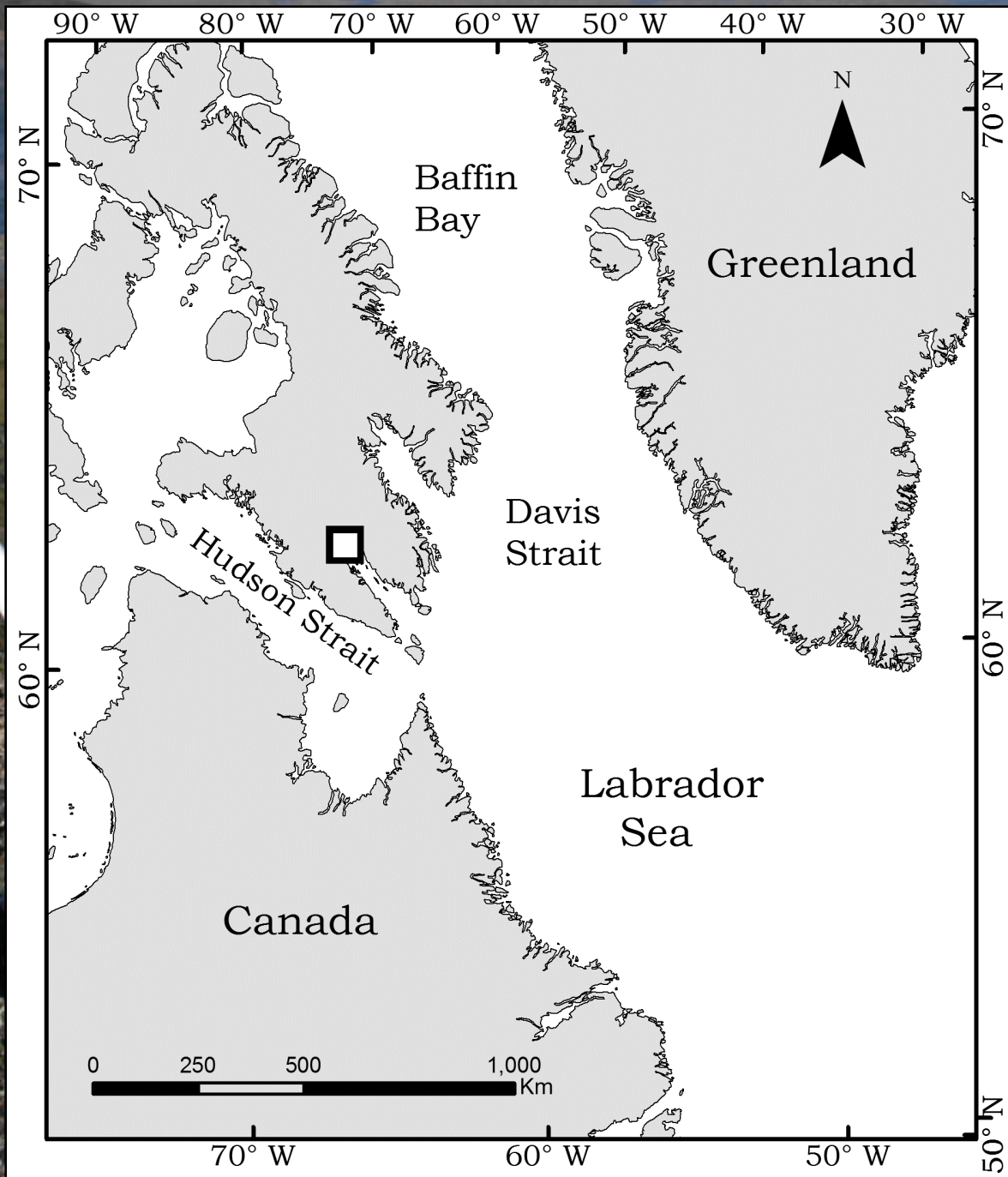


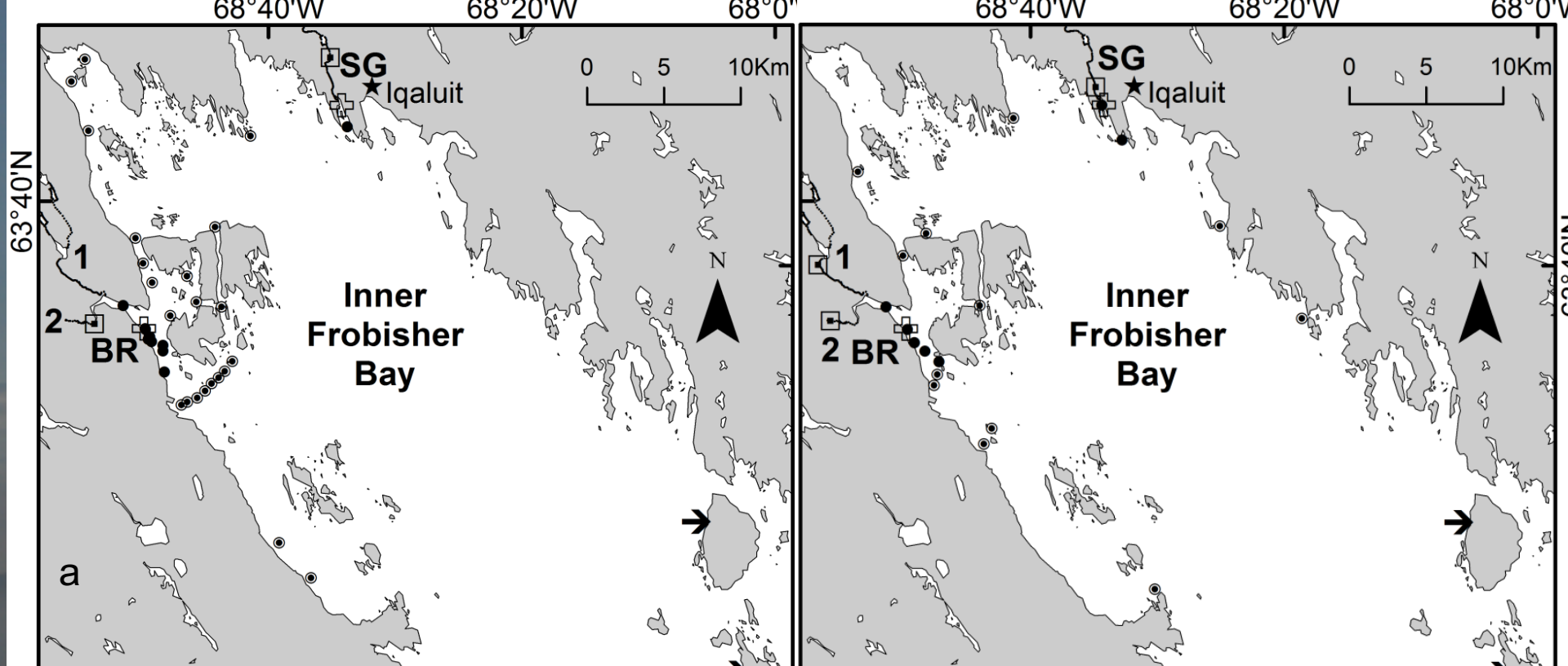
RESIDENCY & MOVEMENT PATTERNS OF ARCTIC CHARR, *Salvelinus alpinus*, RELATIVE TO MAJOR ESTUARIES

Spares AD, Stokesbury MJW, Dadswell MJ, O'Dor RK & Dick TA (2015) *JFB* **86**, 1754-1780.

PHD CANDIDATE
AARON SPARES
DALHOUSIE UNIVERSITY


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tag sites +, Bay of Two Rivers (BR) & Sylvia Grinnell (SG) estuaries,
 NW (1) & SW (2) Armshow R, Iqaluit ☆, Channel Islands ➔,
 estuarine ●, extra-estuarine ◎ and freshwater □ acoustic receivers 2008 (a) & 2009 (b)

MARINE MIGRATION OF INNER FROBISHER BAY ARCTIC CHARR

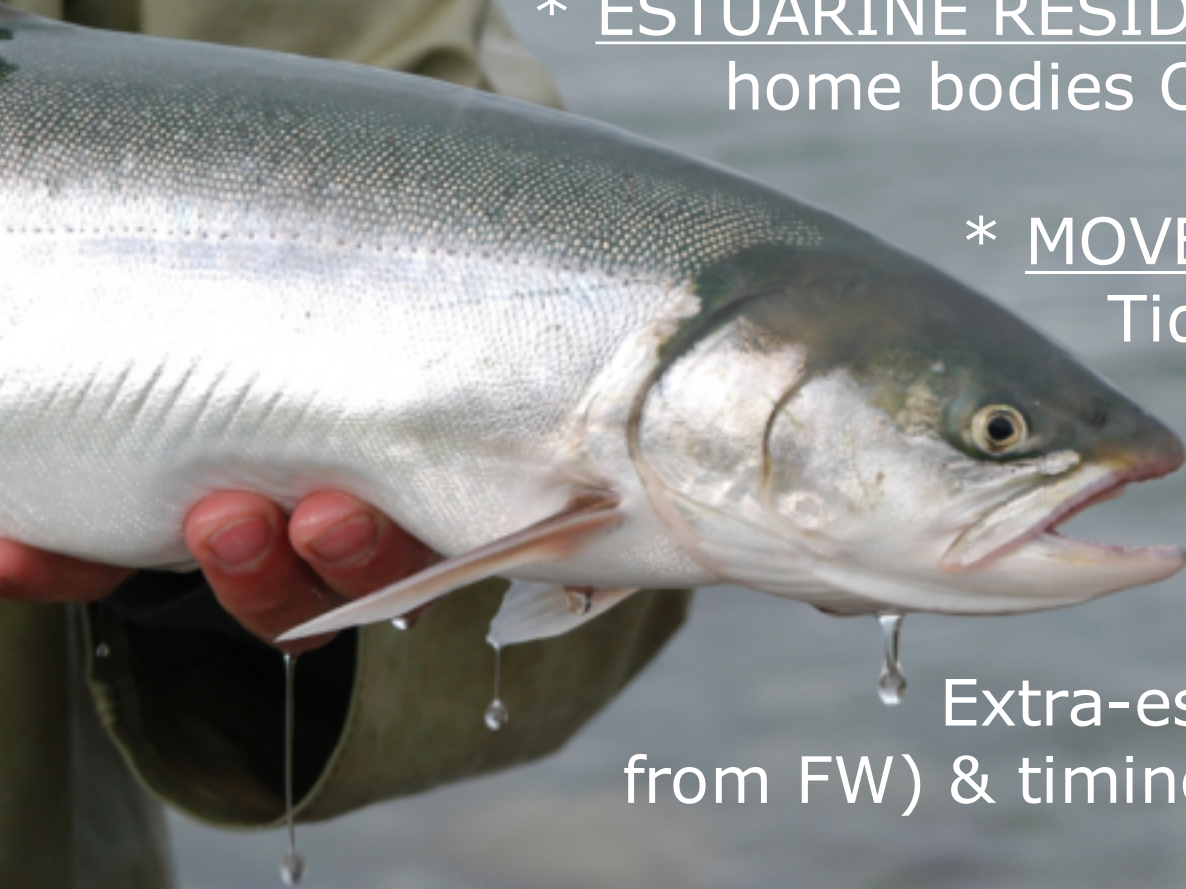
* ESTUARINE RESIDENCY:
home bodies OR nomads?

* MOVEMENTS:
Tidally influenced:
move with
flood & ebb?
Travel rates?

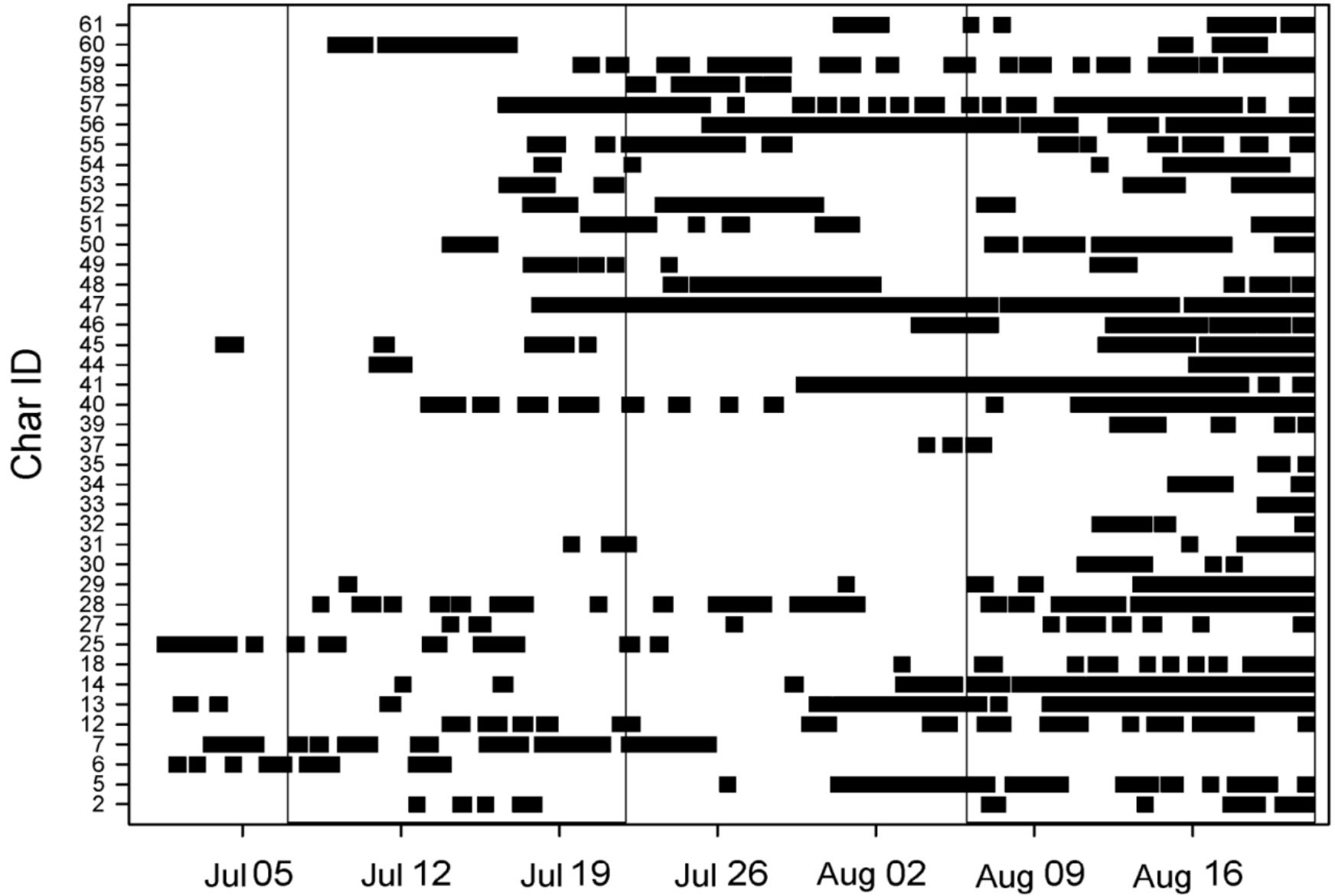
Extra-estuarine: extent (SLD
from FW) & timing

Inter-estuarine: % migrants & timing

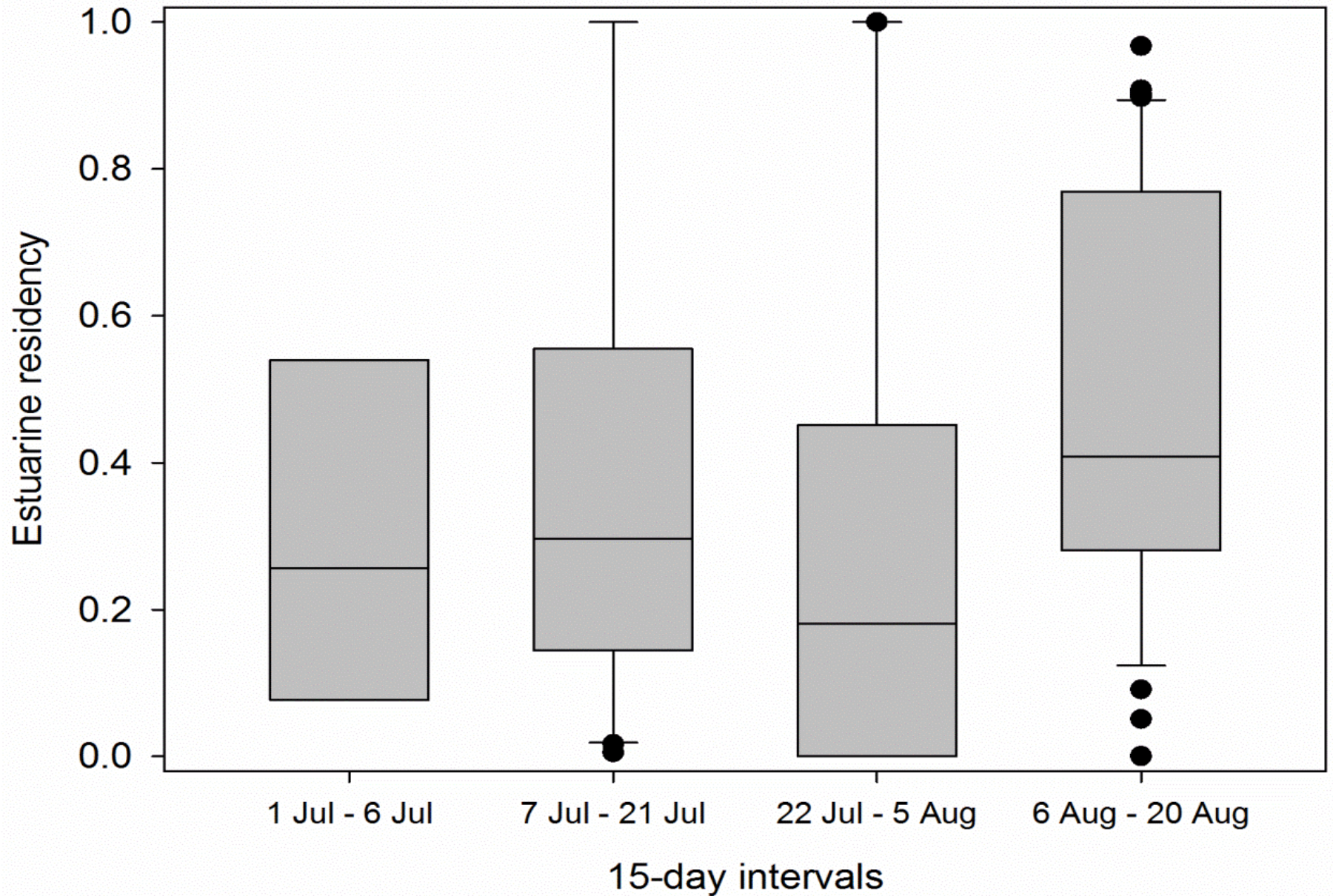
* DURATION: SW entry/exit?

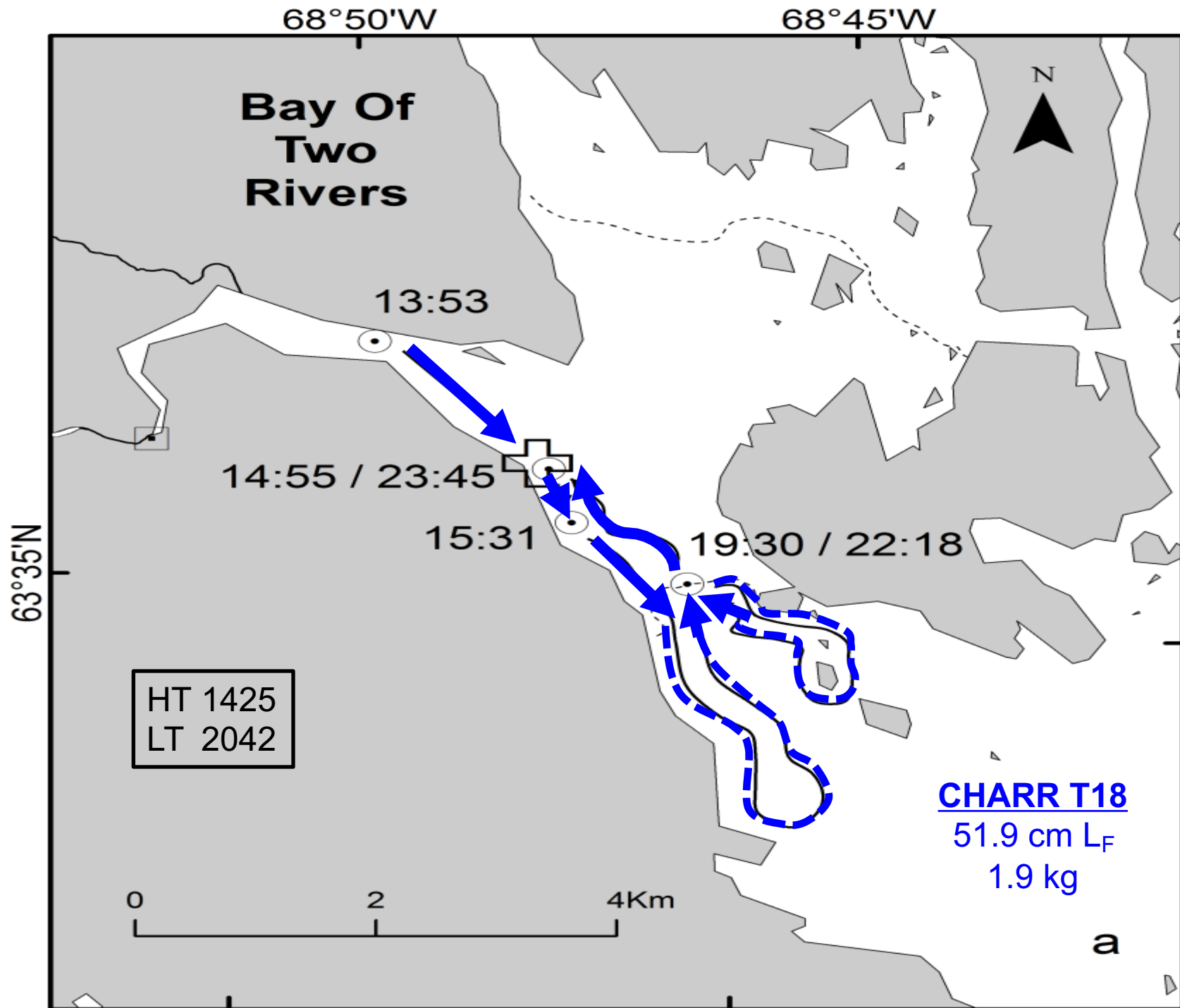


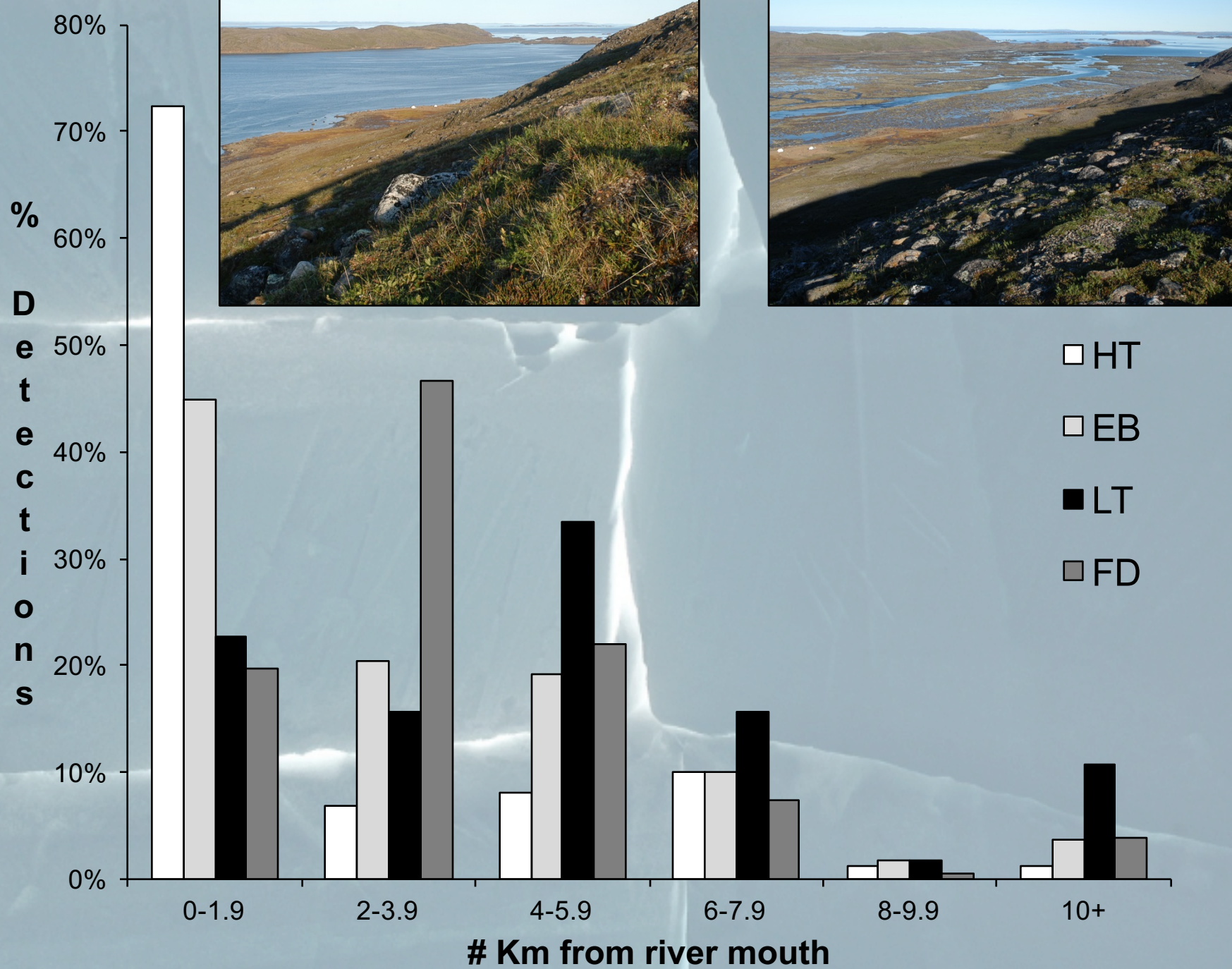
Estuarine presence of charr in BR & SG during 2008 & 2009

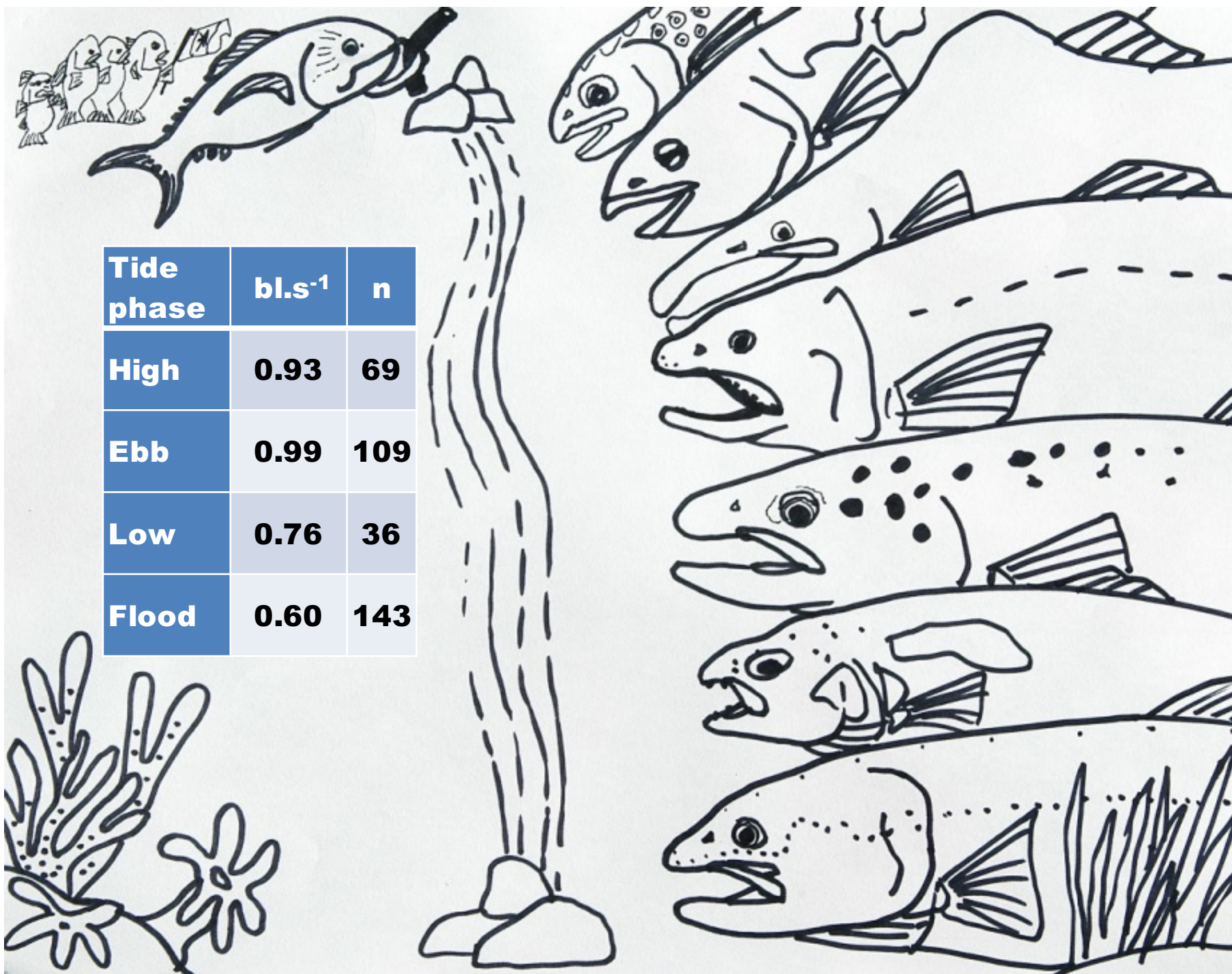


Estuarine Residency VS Migration Timing









Tide phase	bl.s⁻¹	n
High	0.93	69
Ebb	0.99	109
Low	0.76	36
Flood	0.60	143

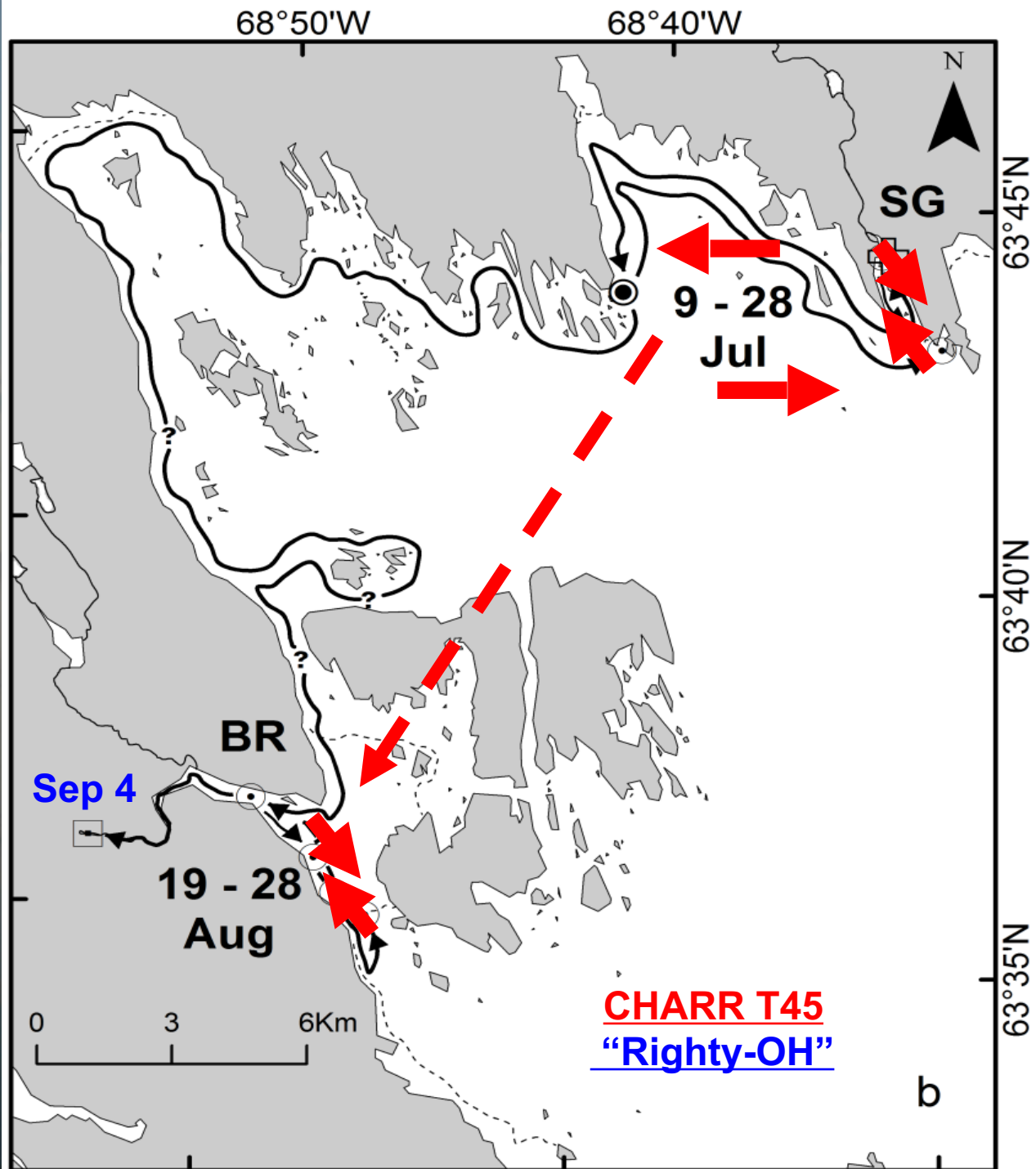
32.9 cm F_L
0.3 kg

5 returns SG
Jul 9 – Jul 28

Long distance trip
Jul 28 → Aug 19

Stayed @ BR
until Aug 28

FW
Sep 4



54.5 cm L_F
1.6 Kg

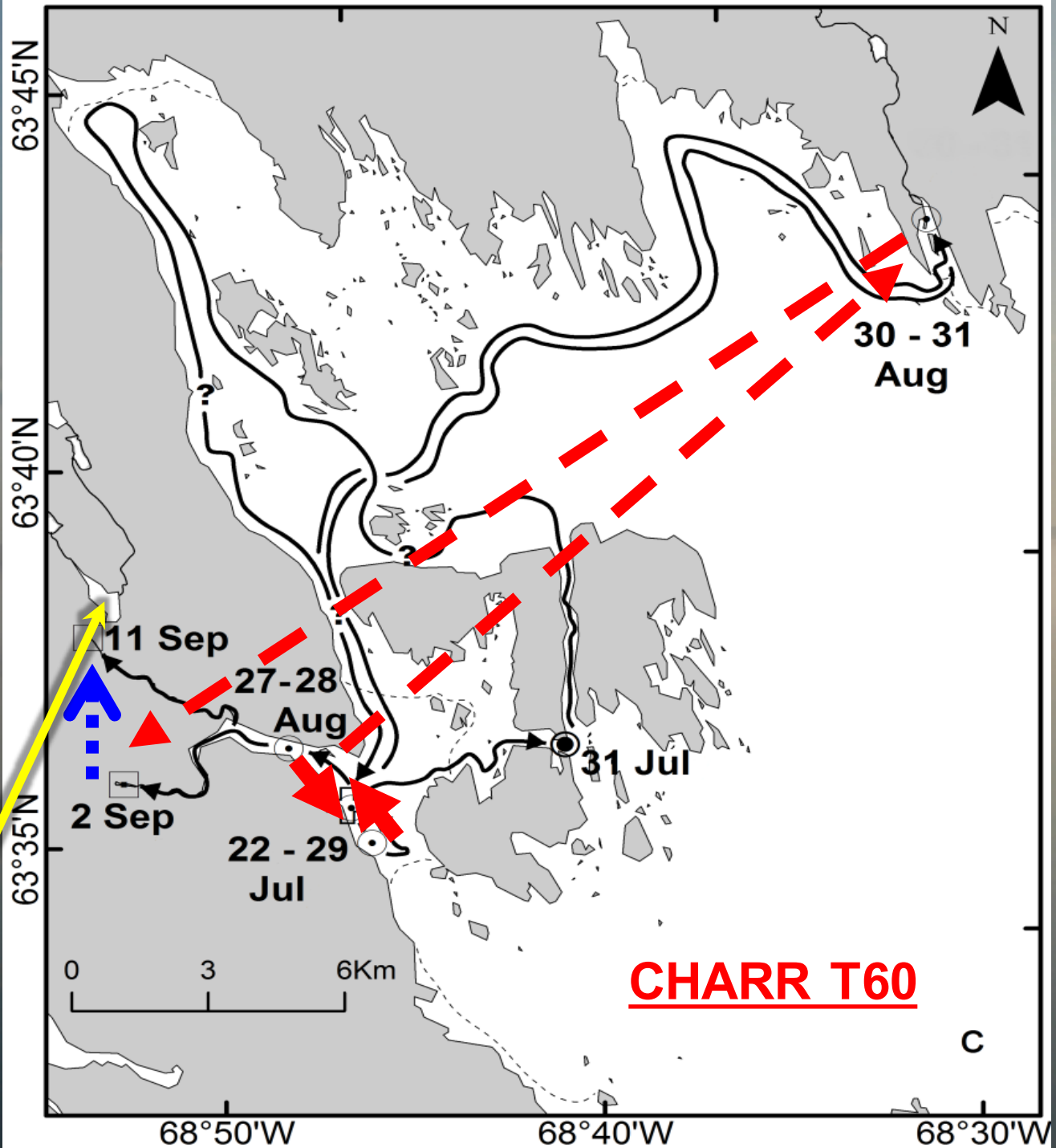
BR Jul 21-29

? Aug undetected

44 km SLD return trip
BR \leftrightarrow SR in 4 d.

FW Sep 2 \rightarrow ?
switched branches
via estuary Sep 11

**! RECAP
6 Dec !**



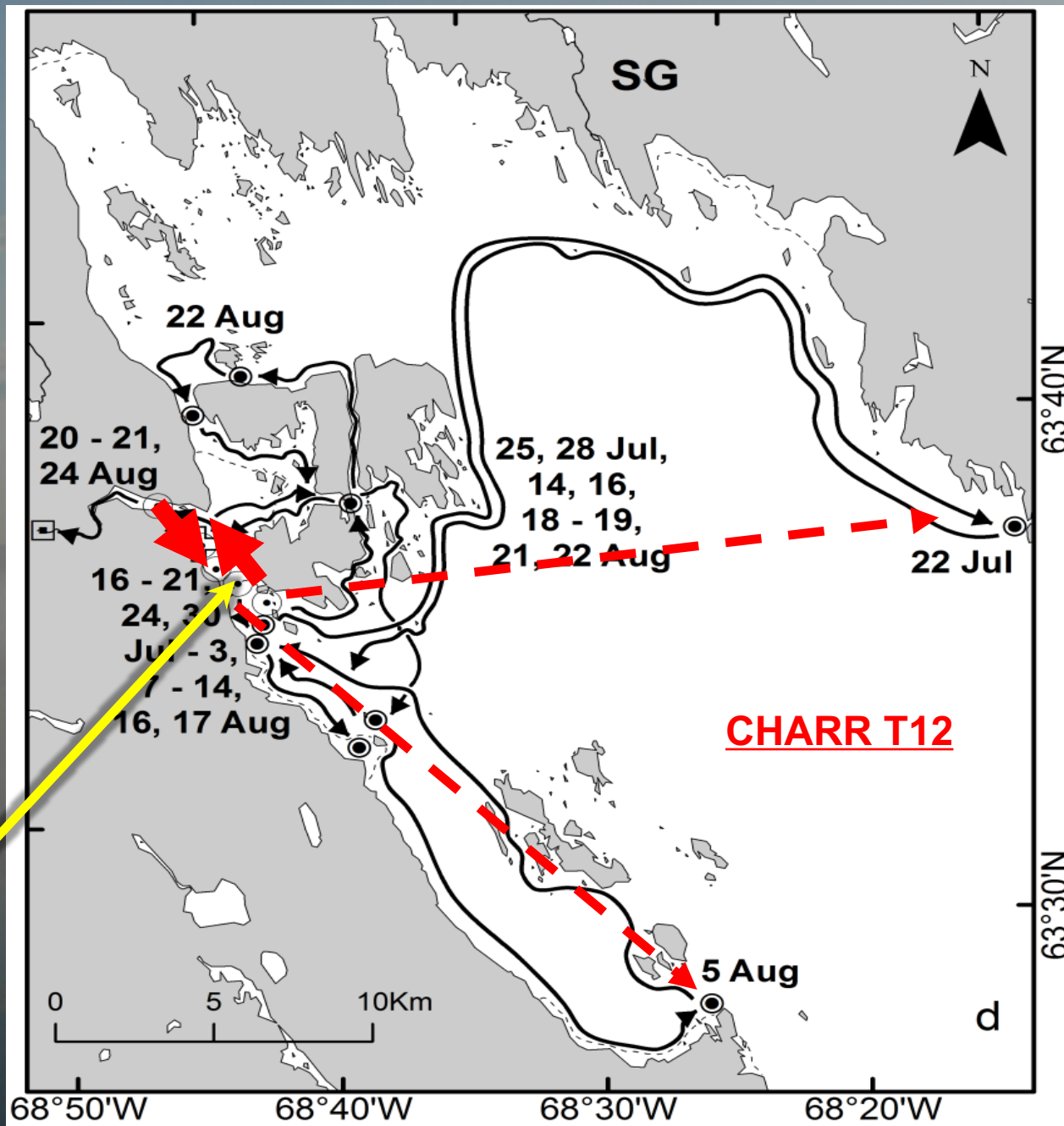
54.0 cm FL
2.1 kg

BR Jul & Aug

Extent <30 km SLD
from BR or SR

FW
24 Aug 2009

! RECAP !
4 Aug 2010



Duration = 63 +/- 7 d.

Mean estuarine residency index 0.4 ('09) - 0.5 ('08)

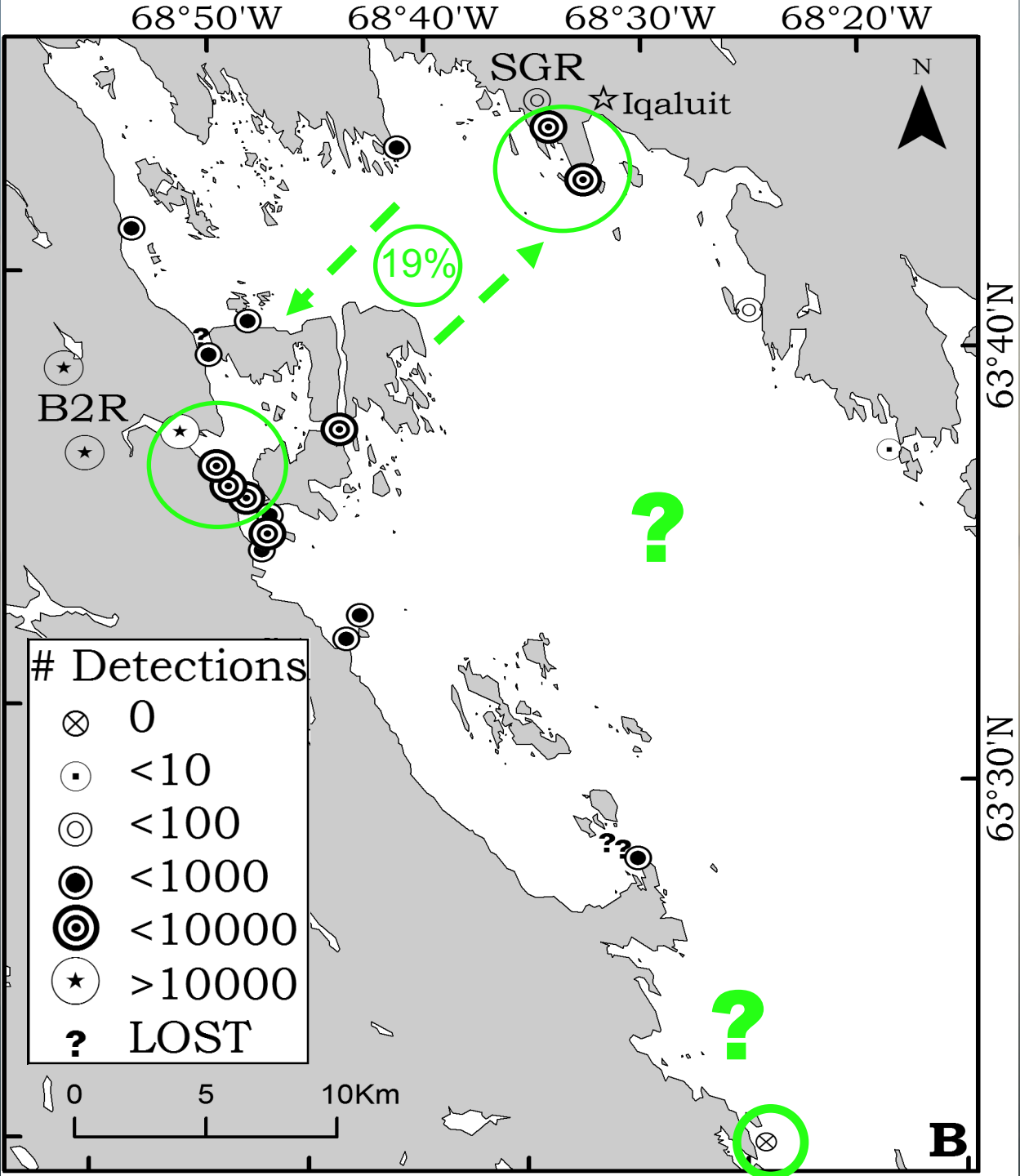
min 0.1

max 1 (34 d.)

42% of tracked charr moved beyond 11 km of main river mouths

Of 2009 survivors,
19% used both
BR & SG estuaries

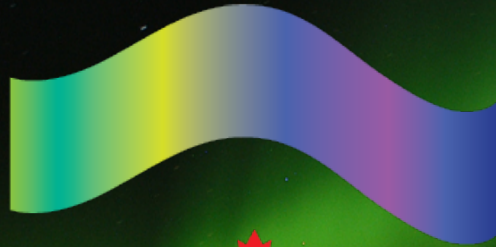
Migrants near shore up to 30 km SLD from main river mouths (mid-late July)





CANADIAN WILDLIFE
FEDERATION

YOUR CONNECTION TO WILDLIFE



NSTP  PFSN

Northern Scientific
Training Program

Programme de formation
scientifique dans le Nord



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Nunavut
Arctic College



ArcticNet
ᑃᓄᓐ ᑕᓄᓐ ᑕᓄᓐ ᑕᓄᓐ



CANADIAN NATIONAL
SPORTSMEN'S SHOWS



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**NSERC
CRSNG**

People. Discovery. Innovation.

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PBP DOGS:

Kahru & Lily





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Nunavut
Arctic College

"Comments,
?s ?"

