



Fisheries and Oceans
Canada

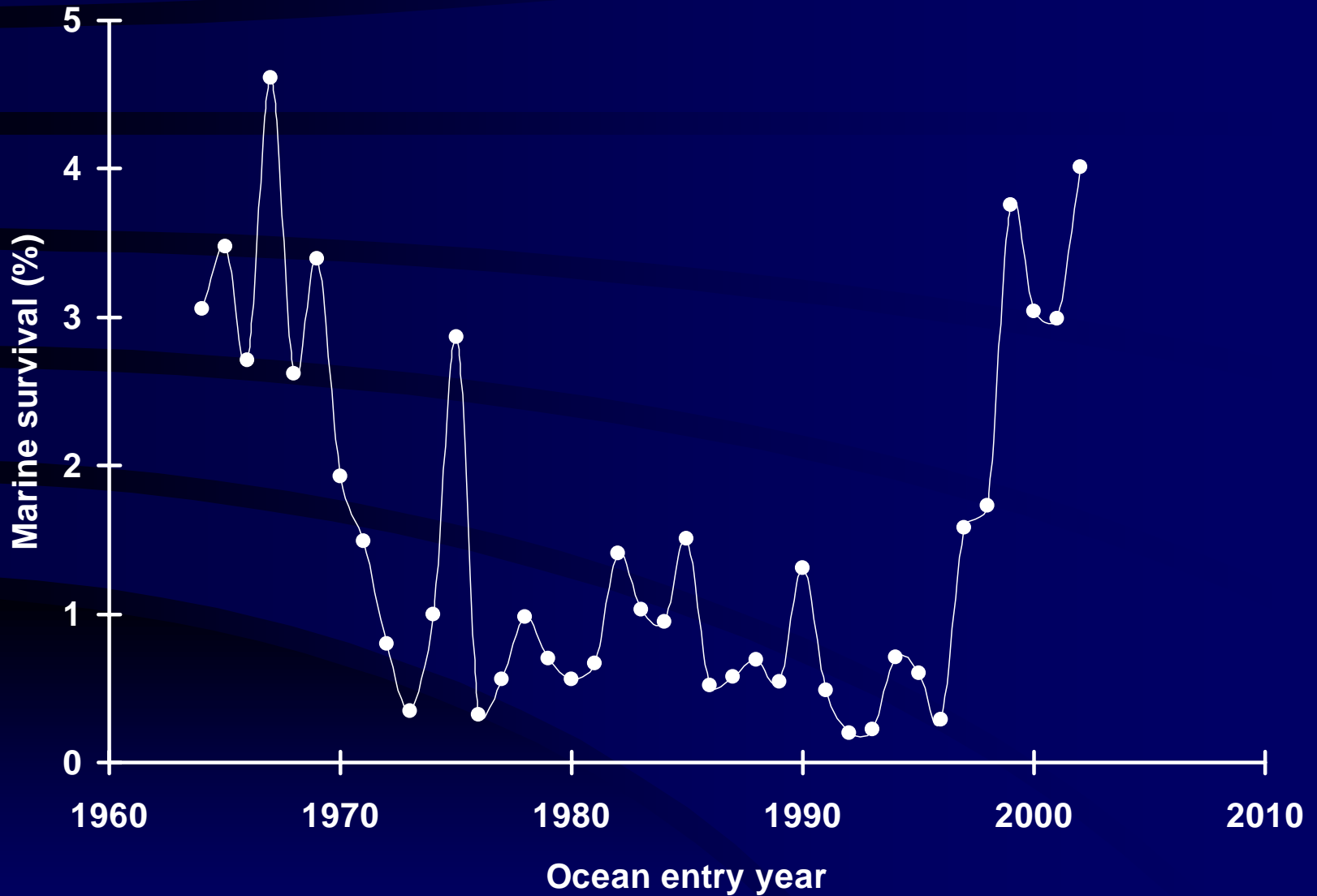
Pêches et Océans
Canada

Canada-USA Salmon Shelf Survival Study

Marc Trudel
Fisheries and Oceans Canada
High Seas Salmon Program

Canada

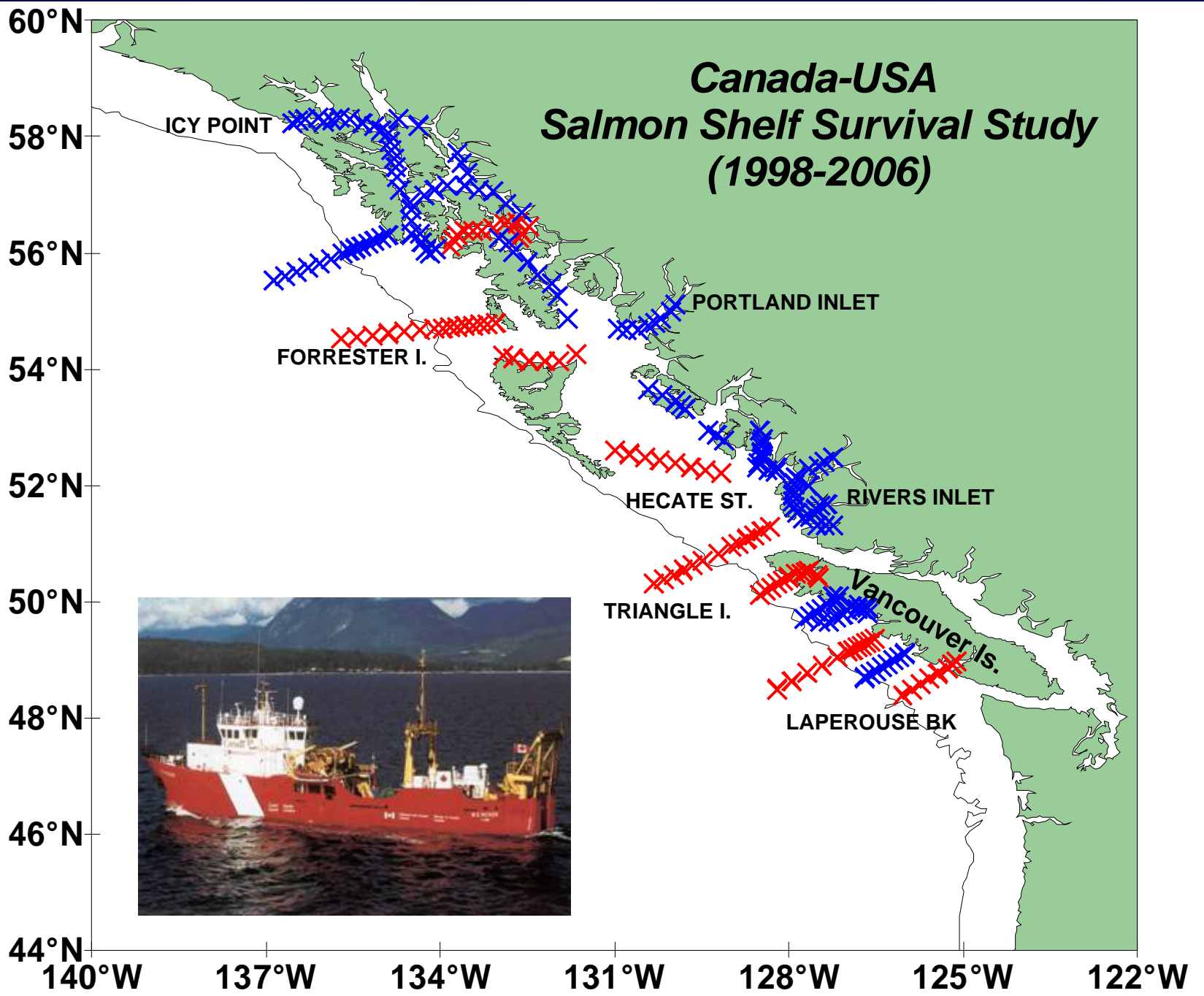
Snake River Spring Chinook Survival



Program objectives

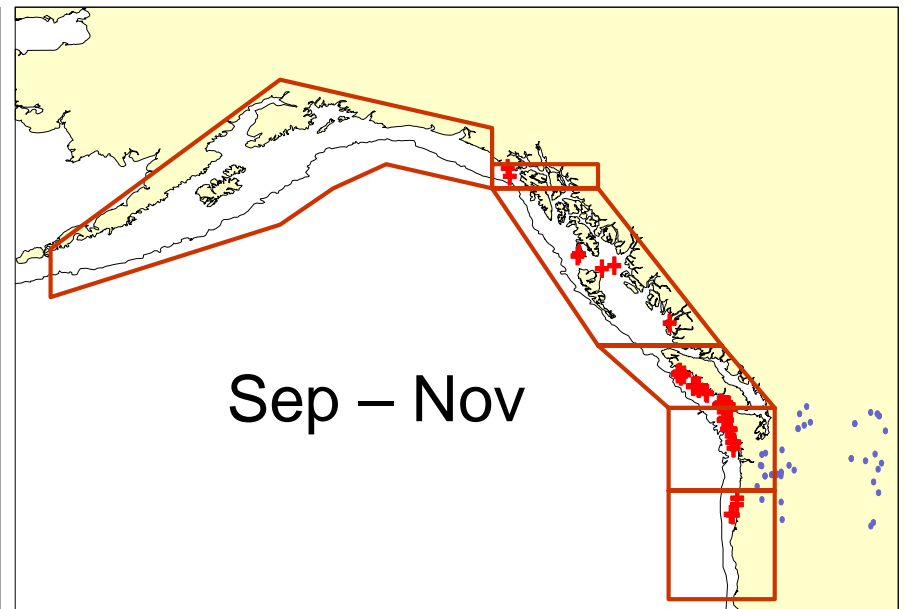
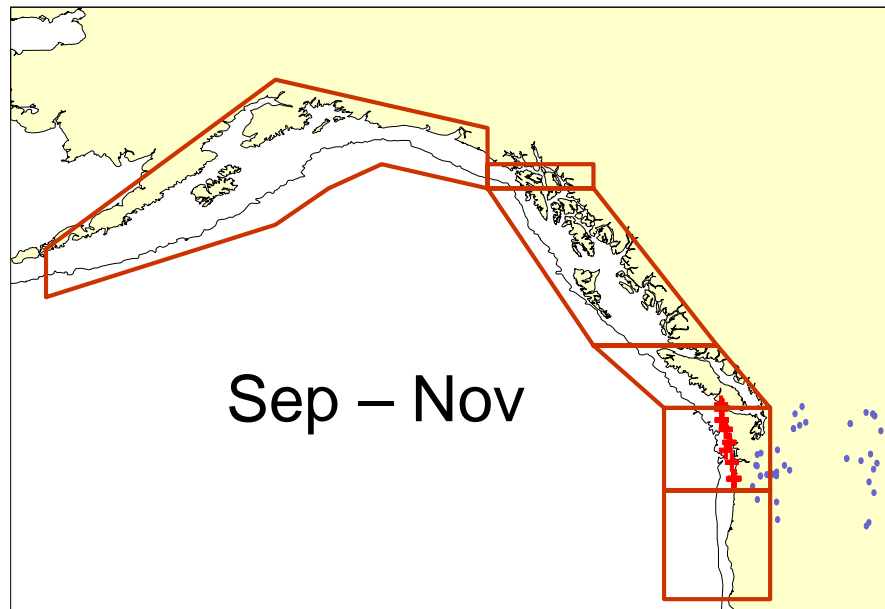
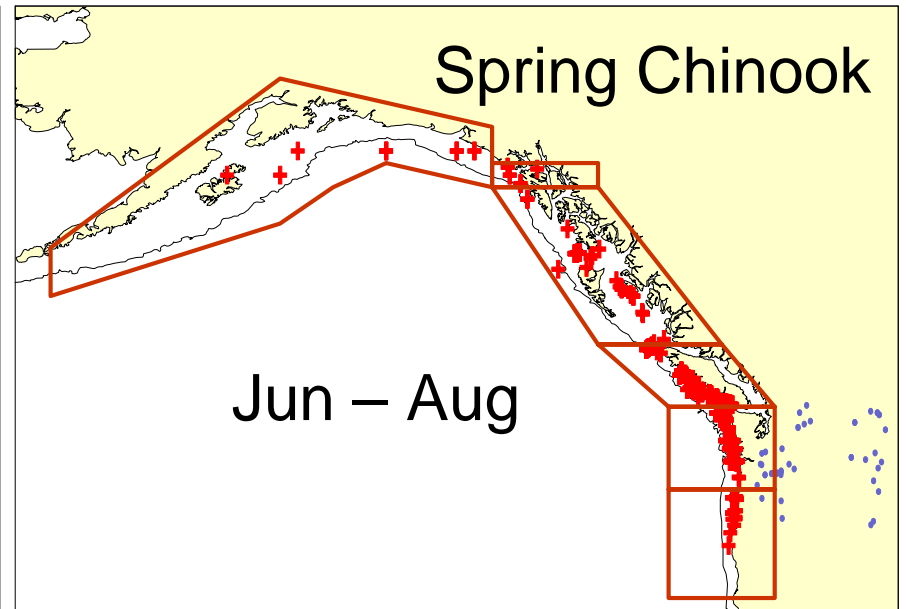
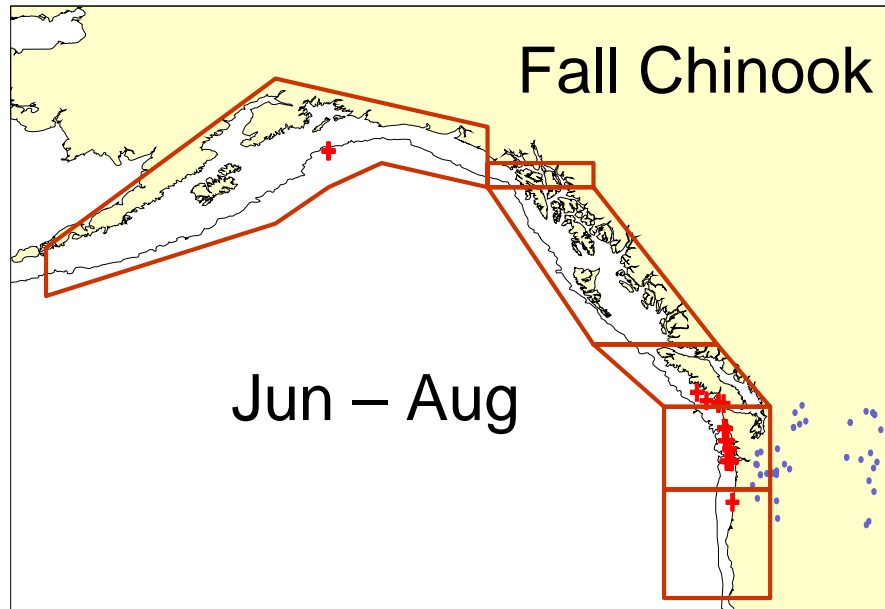
Assess the effects of ocean conditions and climate change on the distribution, migration, growth, and survival of Pacific salmon.

Canada-USA Salmon Shelf Survival Study (1998-2006)

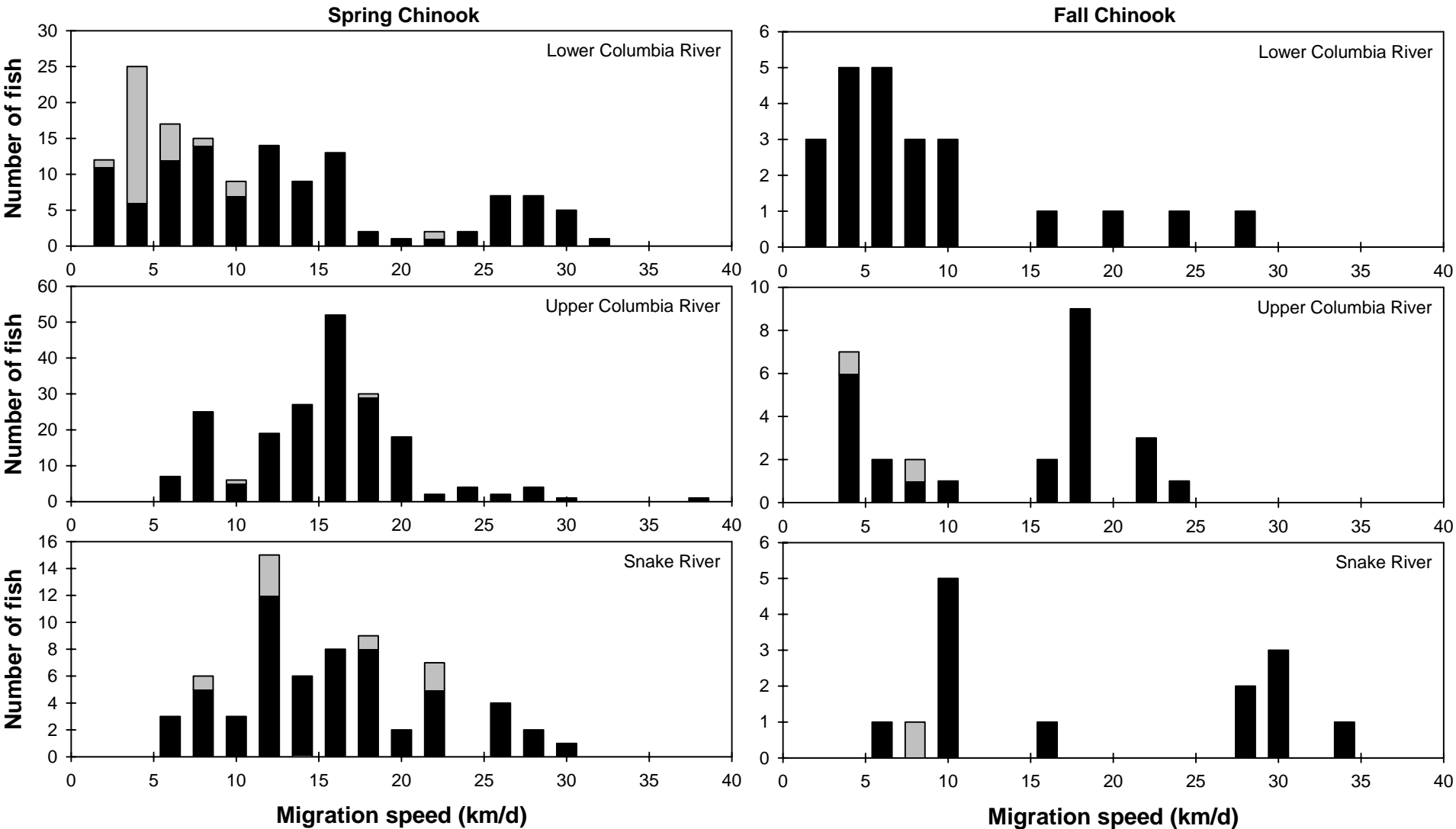


Columbia River Salmon distribution & migration

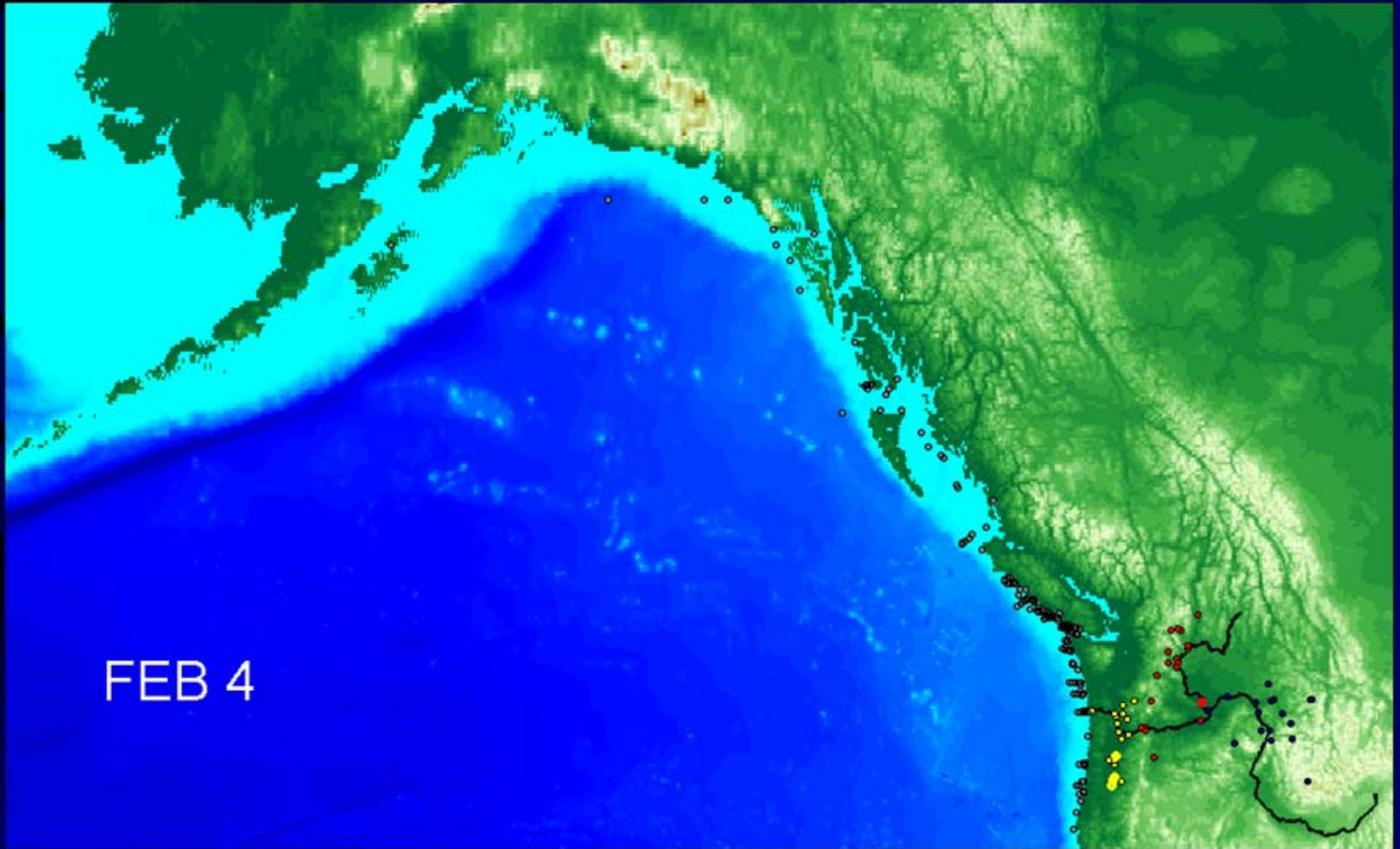
Juvenile Columbia-Snake River Chinook



Spring Chinook Salmon Migration Speed

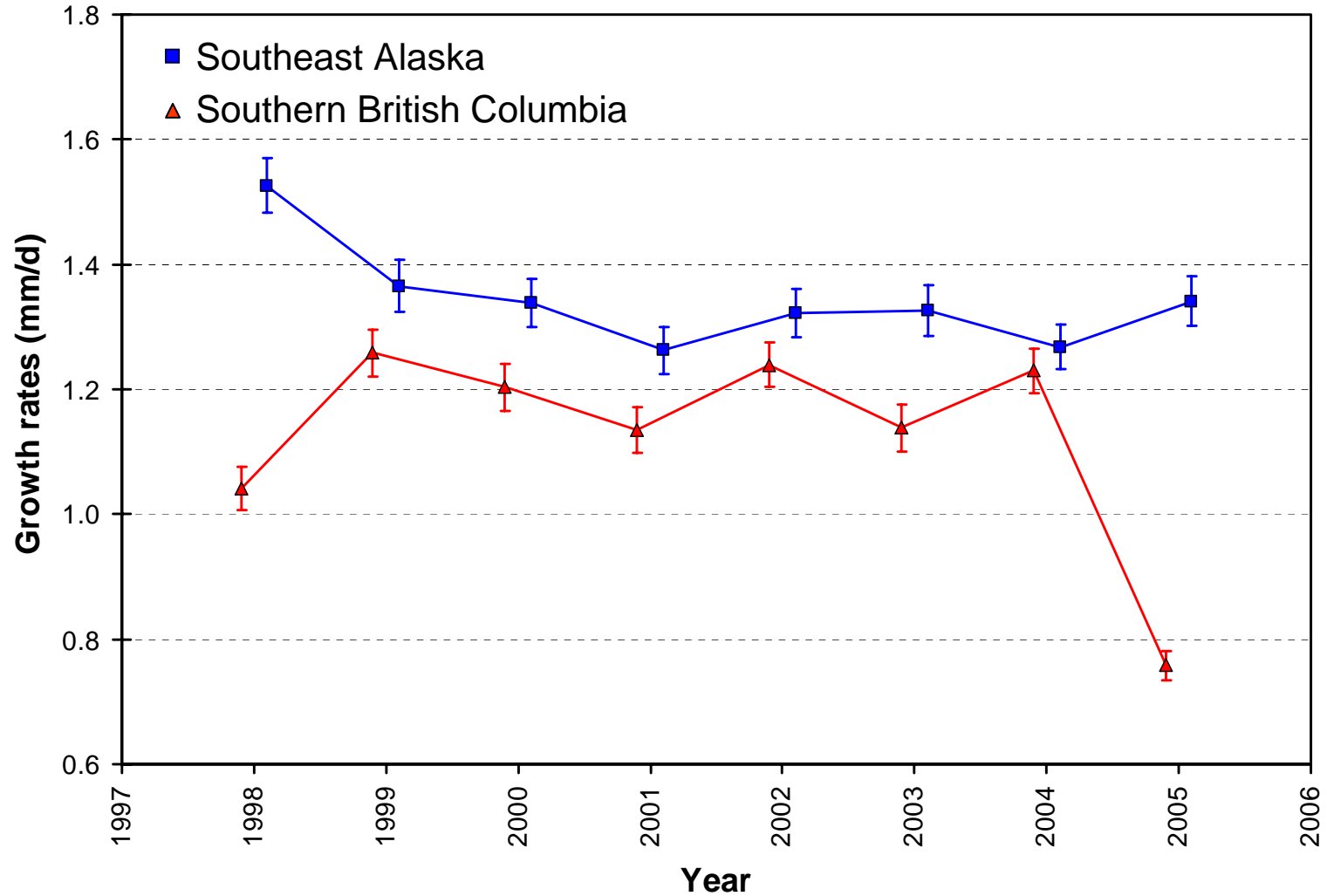


Juvenile CR Spring Chinook Migration

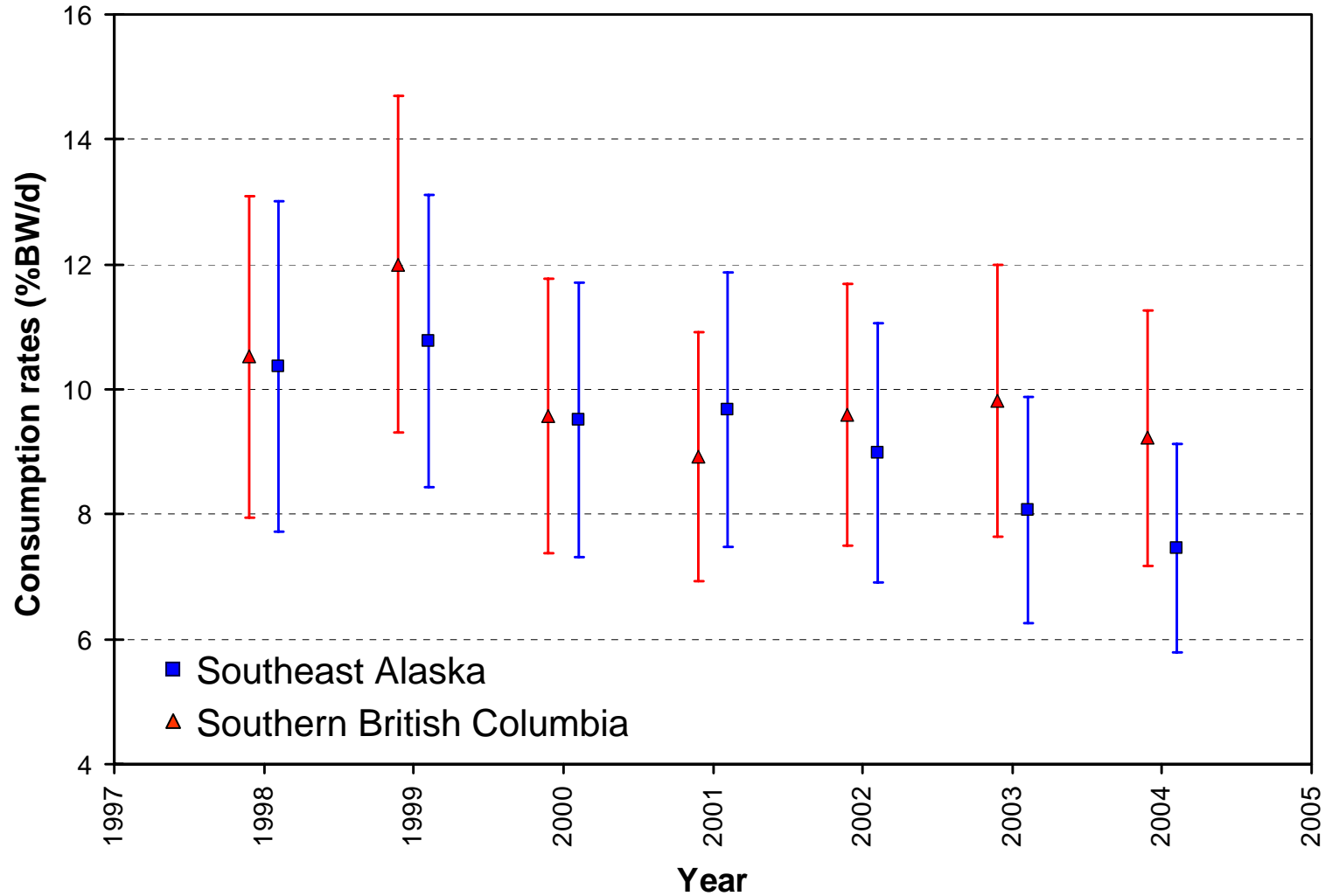


Ocean Conditions & Salmon growth

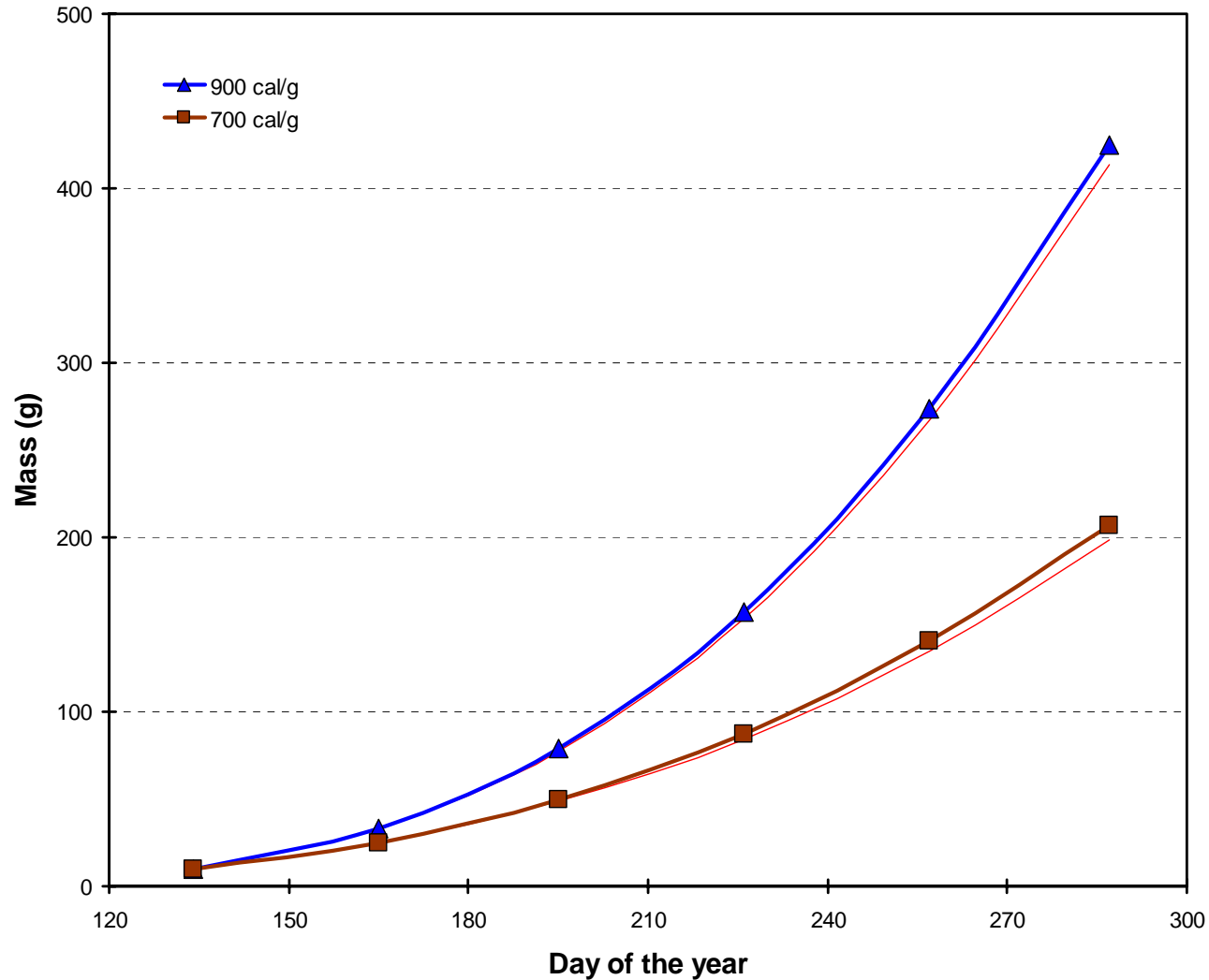
Coho Growth Rate (May-Oct)



Coho Feeding Rate (May-Oct)

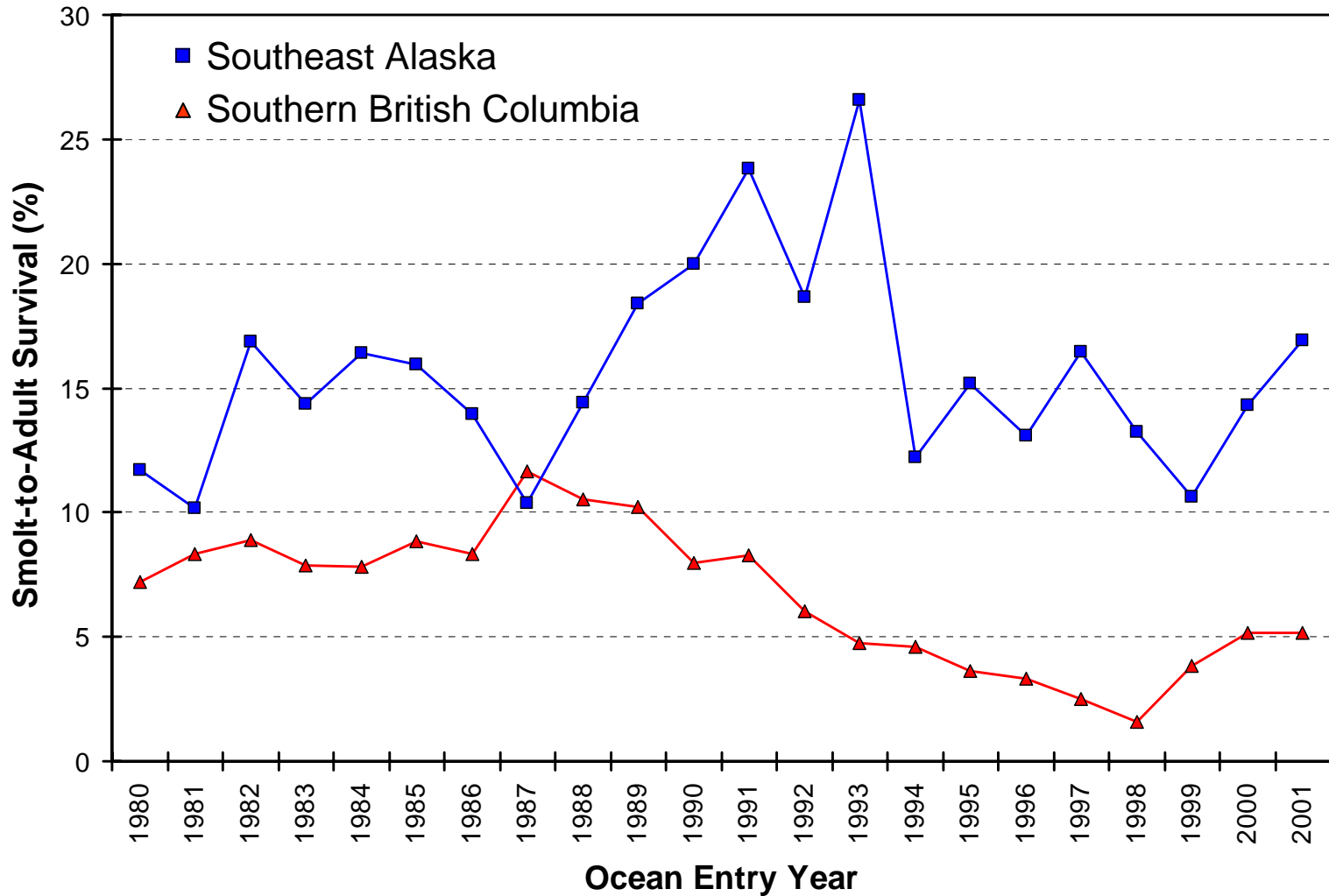


Simulated Growth of Coho (May-Oct)

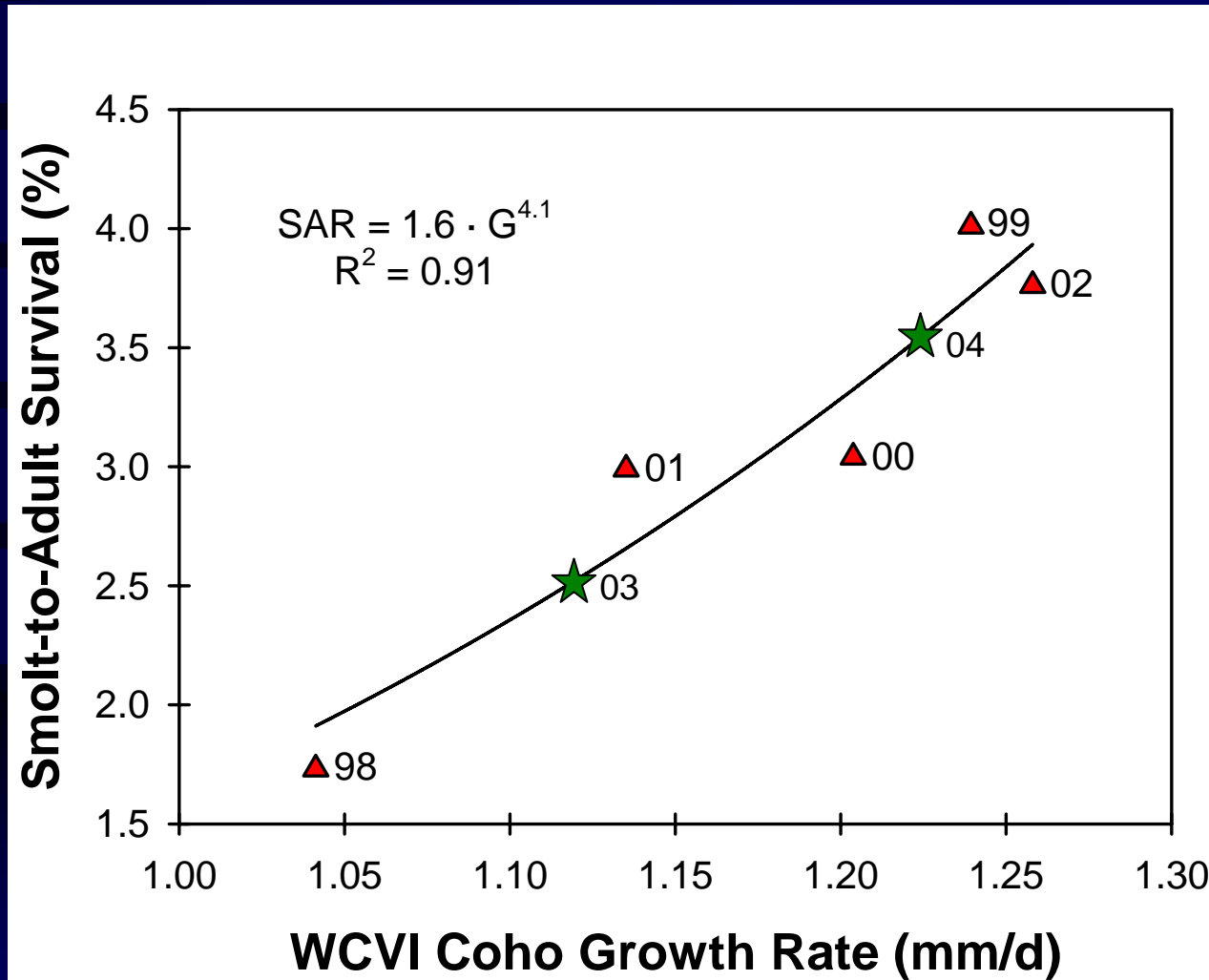


Ocean Conditions & Salmon Survival

Coho Marine Survival



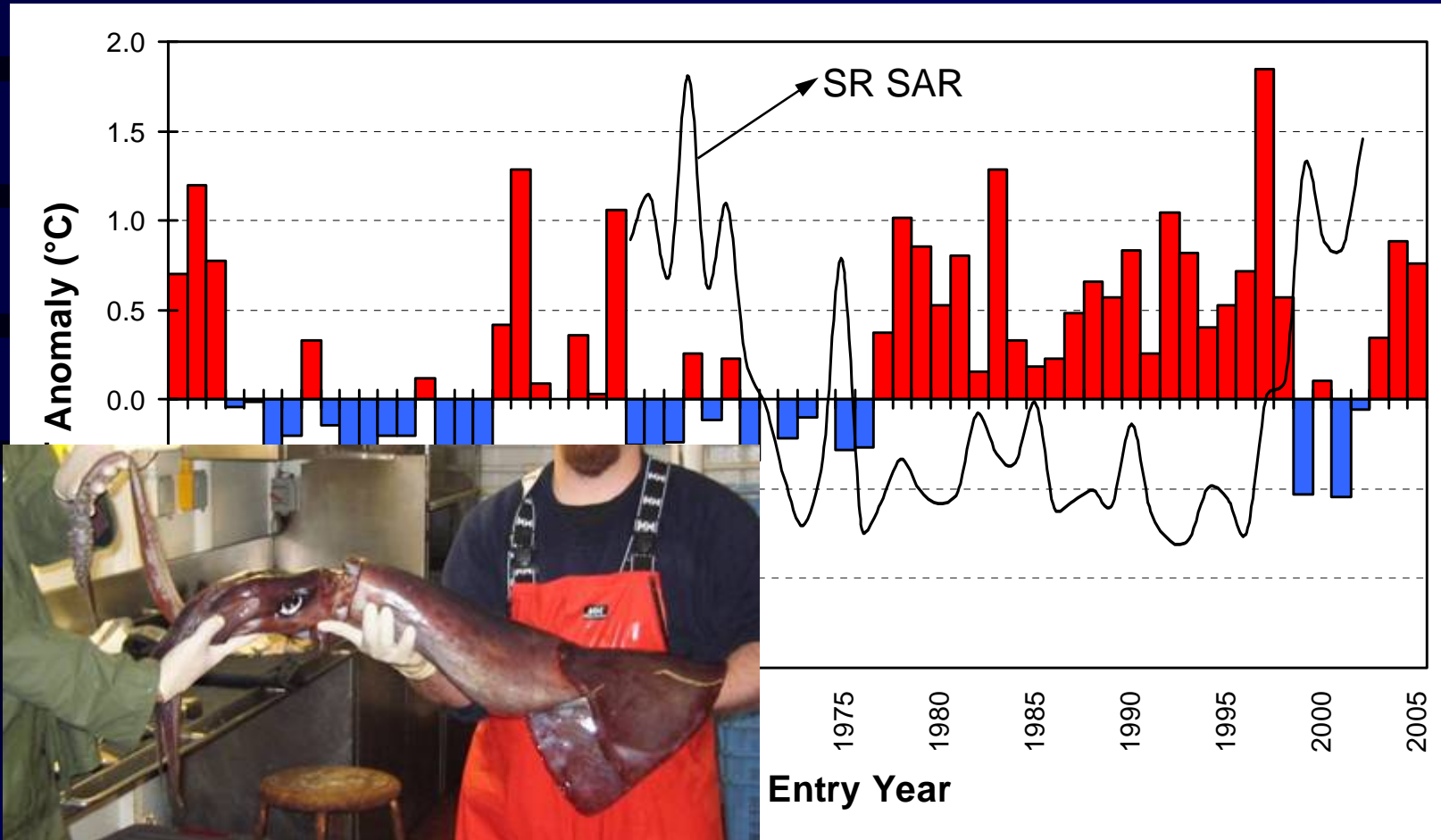
Snake River Spring Chinook Survival



Summary

1. CR Fall Chinook establish coastal residence
2. CR Spring Chinook and Coho
 - Rapid northward migration
 - CR resident off WCVI and WA
 - Some southward migration (LOCR & SR)
3. Higher growth and survival in Alaska than southern BC
4. Marine survival of CR Chinook correlated to growth potential in British Columbia
5. Changes in growth likely due to changes in prey quality

West Coast of Vancouver Island Temperature



Acknowledgements

David Welch (DFO - Nanaimo)

Terry Beacham (DFO - Nanaimo)

John Candy (DFO - Nanaimo)

Dave Higgs (DFO - West Vancouver)

Rusty Sweeting (DFO - Nanaimo)

Joe Fisher (OSU - Corvallis)

Frank Whitney (DFO - Victoria)

Howard Freeland (DFO - Victoria)

Moira Galbraith (DFO - Victoria)

Dave Mackas (DFO - Victoria)

Jen Zamon (NMFS - Oregon)

Joe Orsi (NMFS - Juneau)

J. Morris, M. Thiess, T. Zubkowski, H. MacLean, D. Anderson, E. Demers, P. Eveson, J. Fitzgerald, S. Grant, M. Jacobs, N. Jacques, A. Ladouceur, R. Lauzon, J. Love, G. Moody, M. Robert, S. Romaine, S. Towes, S. Tucker, T. Walker, J. Wickstead, M. Wyeth, and many other volunteers

CCGS W.E. Ricker, F.V. Ocean Selector, F.V. Frosti

Funding: DFO, Bonneville Power Administration

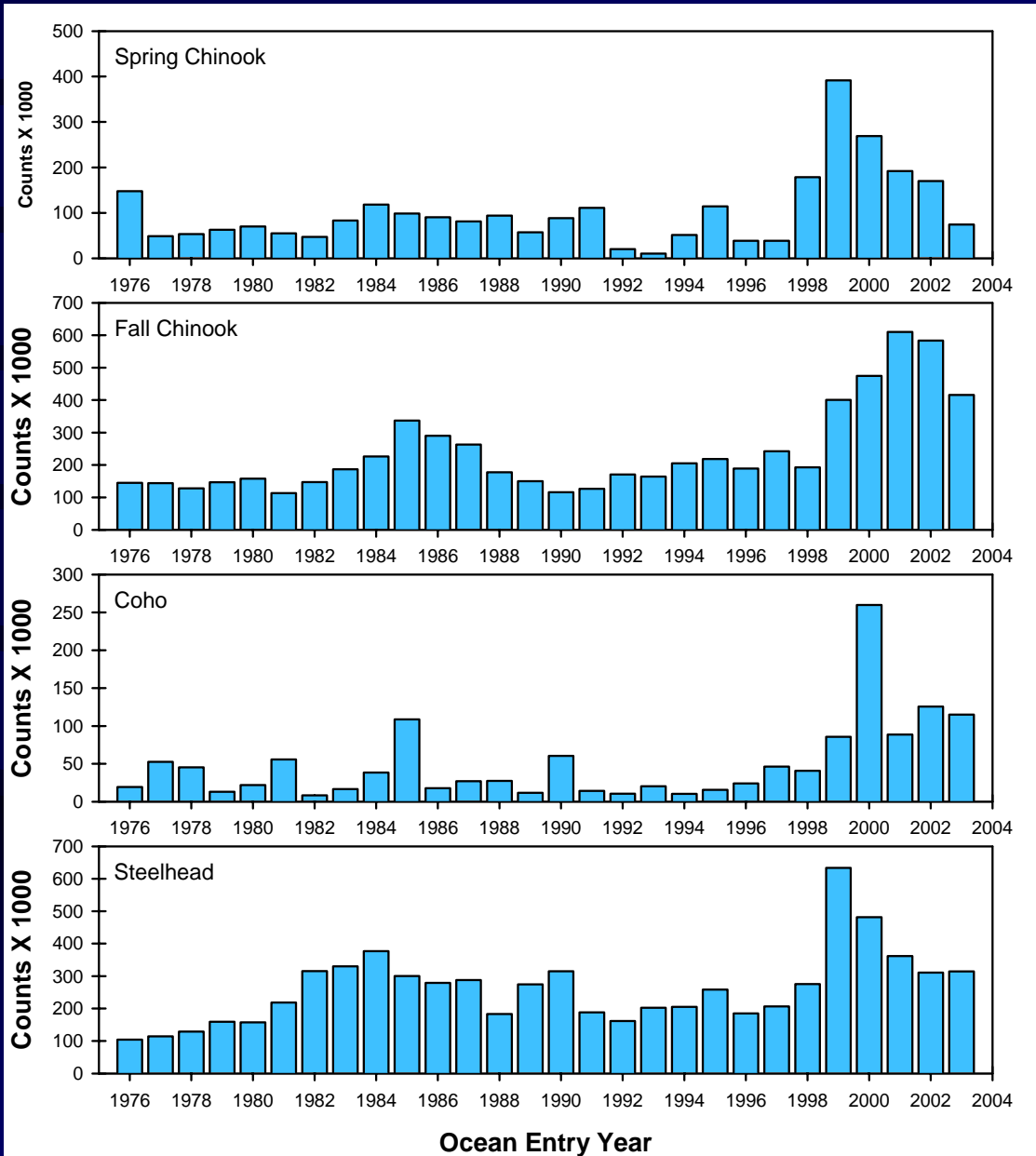


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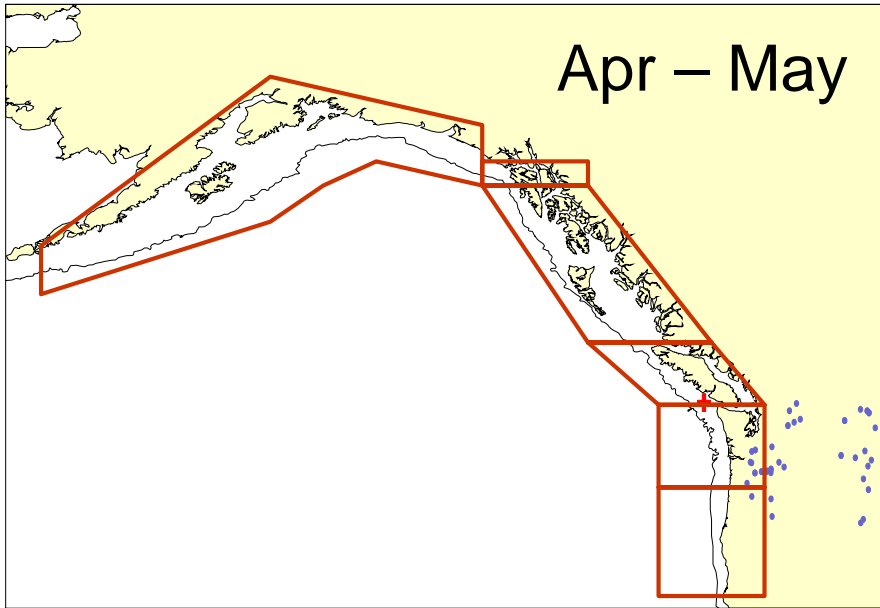


Salmon & Steelhead Returns to the Bonneville Dam

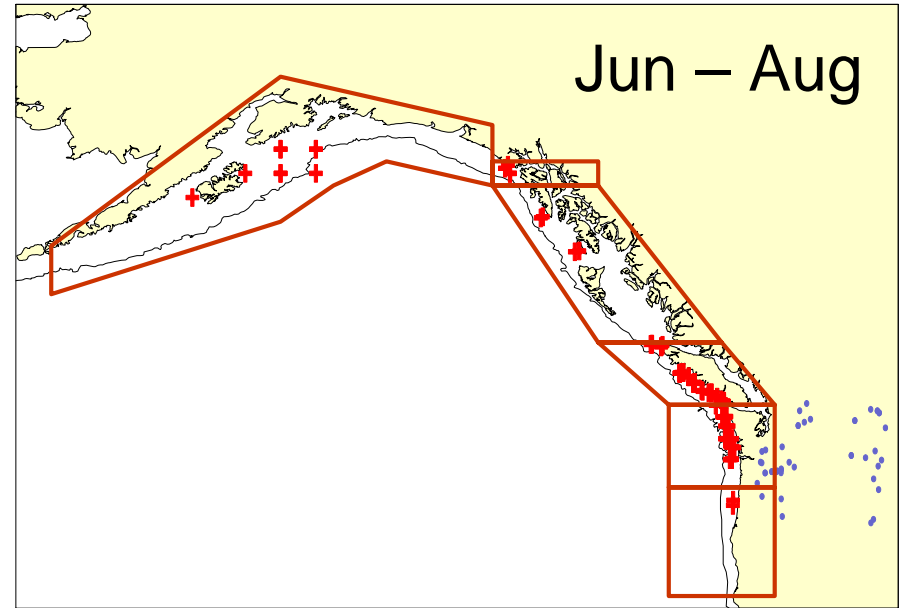


Columbia River Coho

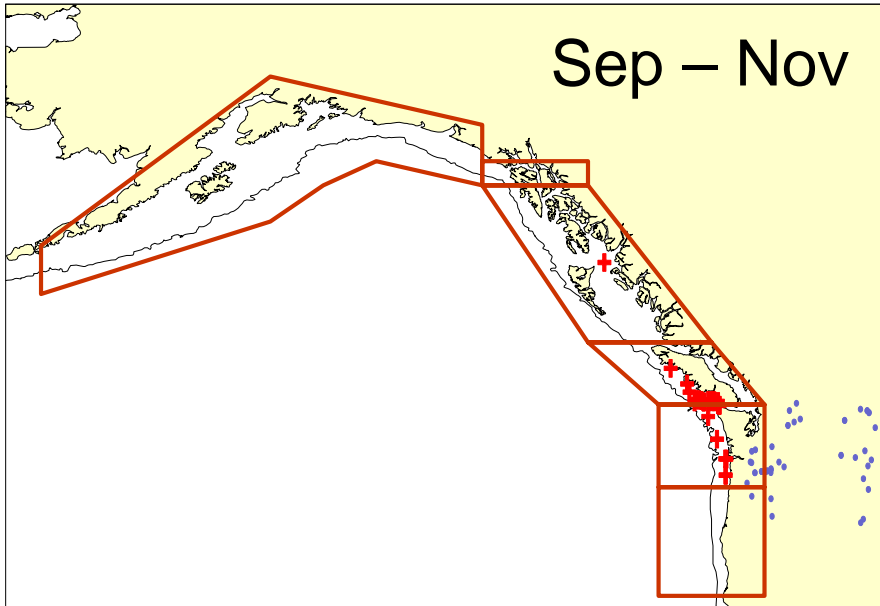
Apr – May



Jun – Aug



Sep – Nov



Feb – May

